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Maximum Match 100%
Listing first 45 summaries
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Match
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Copyright (c) 1993 - 2006
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Biocceleration Ltd.
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Human pap
Amino aci
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AR63865

The present sequence represents a fusion protein, comprising E6 and E7 polypeptides from human papillomavirus type 16 (HPV16). The fusion protein is designated E6E7TetM, and comprises an E6 amino terminus (where residues 63 and 106 have been replaced with glycine) and an E7 carboxy terminus (where residues 24 and 26 have been replaced with glycine). E6E7TetM is representative of fusion proteins of the invention. The specification describes human papillomavirus E6 and E7 polypeptides, where the E7 polypeptide has mutations at any one or more of the amino

New polypeptide comprising human papillomavirus E6 and E7 polypeptides, useful for treating or preventing human papillomavirus (HPV)-associated cancers, e.g. cervical cancer.

WPI; 2004-316328/29. N-PSDB; ADO44063.

Smith L,

Cassetti MC;

03-OCT-2002; 2002US-0415929P

(AMHP) WYETH HOLDINGS CORP.

Claim 22; Page 68-69; 101pp; English.

45	44	43	42	41	40	39	ა 8	37	36	ა 5	ω 4	33	32	31	30	29	28	27	26	25	24
580	779.5	815	818	821	823	823	823	823	823	823	823	823	823	823	823	823	823	823	823	823	823
69.9	93.9	98.2	98.6	98.9	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2
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		Ad190078 Hu		Ado44066 Am	Aed52646 Fu	Aay02637 CL	Aay25381 HP	Aed52638 Fu	Aay02633 Pr		Aed52642 Fu	Aay02635 CL	Aay25379 HP	Aed52634 Fu		Aay25376 HP	Aar97561 Hu	Aar27725 HP	Aef40157 Human	Adr47005 Hu	Ado44070 Am
V E6 re	Papilloma	Human pap	HPV-16 E6	Amino aci	Fusion pr	CLYTA-E6E	HPV fusio	sion pr	Prot.D1/3	HPV fusio	Fusion pr	CLYTA-E6-	HPV fusio	sion pr	Prot.D1/3	HPV fusio	Human pap	HPV 16 E6	uman pap	Human pap	Amino aci

ALIGNMENTS

RESULT 1 ADO44062 02-OCT-2003; 2003WO-US031726 Synthetic. Human papillomavirus type 16. anal cancer; E6 protein; E7 protein; fusion protein; HPV16; HPV-associated cancer; cervical cancer; immune response; lower gastrointestinal tract cancer ADO44062; ADO44062 standard; protein; 248 15-APR-2004. WO2004030636-A2 Amino acid sequence of a fusion protein designated E6E7TetM 15-JUL-2004 reproductive system cancer; penile cancer; vulvar cancer (first entry) B

cancer;

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RESULT 2
AD044064
ID AD04
XX AD04
AC AD04
XX AD04
XX AD04
XX AD04
XX AD04
XX B6 F
KW Cerv
KW Anal
XX AD04
XX AD04
XX B6 F
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                                          The present sequence represents a fusion protein, comprising E6 and E7 polypeptides from human papillomavirus type 16 (HPV16). The fusion protein is designated E6EPPentM, and comprises an E6 amino terminus (where residues 63 and 106 have been replaced with glycine) and an E7 carboxy terminus (where residues 24, 26 and 91 have been replaced with
                                                                                                                                                                                                                                                                                                       New polypeptide comprising human papillomavirus E6 and useful for treating or preventing human papillomavirus cancers, e.g. cervical cancer.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Smith L,
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                                                                                                                                                                                                                                                  Page
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                                                                                                                                                                                                                                                  70-71; 101pp; English.
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Pred. No. 4.6e-84;
0; Mismatches 2;
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                                                                                         Determining a possible recurrence of a (pre-)cancerous growth in a patient infected with human papilloma virus (HPV), comprises incubating the sample with an HPV E6 or E7 peptide and detecting a cell-mediated
                                                                                                                                                                                                                                                                                                                                                                                     Cytostatic; peptide therapy; immunotherapy; pre-; cancerous cancer; human papilloma virus; cervix; cell-mediated immune
                                                                                                                                                 WPI; 2003-239363/23.
                                                                                                                                                                                                                                                           19-JUL-2002; 2002WO-US023198
                                                                                                                                                                                                                                                                                                                                                                      HPV; HPV-16
                                                                                                                                                                                                                                                                                                                                                                                                                            HPV-16 protein sequence, SEQ
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                                                                                                                                                                                                                                                                                                                                           Human papilloma virus
                                                                                                                                                                                                                                                                                                                                                                                   cancer; human papilloma virus;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAO22640 standard; protein; 151
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                                                                                                                                                                                                       (TEXA ) UNIV TEXAS SYSTEM.
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98.7%;
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Disclosure; Page 129-130; 132pp; English

response

e invention relates to a novel method for determining the possibility recurrence of a (pre-)cancerous growth in a patient infected with man papilloma virus (HPV) or suspected of being infected with HPV, an

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RESULT 4
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The invention relates to a novel method for determining the possibility of recurrence of a (pre-)cancerous growth in a patient infected with human papilloma virus (HPV) or suspected of being infected with HPV, and has or had a (pre-)cancerous growth on or around the cervix. The novel method comprises incubating an E6 or E7 peptide of HPV with a sample from the patient, and assaying the sample for a cell-mediated immune response against the peptide. The method is useful for determining the possibility
                                                                                                                                                                                                                                                                                                                                                     Determining a possible recurrence of a (pre-)cancerous growth in a patient infected with human papilloma virus (HPV), comprises incubating the sample with an HPV E6 or E7 peptide and detecting a cell-mediated
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             method comprises incubating an E6 or E7 peptide of HPV with a sample from the patient, and assaying the sample for a cell-mediated immune response against the peptide. The method is useful for determining the possibility and preventing the recurrence of a (pre-)cancerous growth in a patient infected with HPV or suspected of being infected with HPV. The HPV E6 or E7 peptides are useful in immunotherapy for the preventing or reducing the risk of development of (pre-)cancerous growths. This sequence represents an HPV-16 protein of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Cytostatic; peptide therapy; immunotherapy; pre-; cancerous growth; cancer; human papilloma virus; cervix; cell-mediated immune response;
                                                                                                                                                                                                                                                                    Disclosure;
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No. 4.2e-84;
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Best Local :
The present sequence represents a wild type E6 protein from human papillomavirus type 16 (HPV16), which is used to produce fusion proteins of the invention. The specification describes human papillomavirus E6 and E7 polypeptides, where the E7 polypeptide has mutations at any one or more of the amino acids corresponding to amino acids 24, 26 or 91 of the sequence given in ADO44073 and the E6 polypeptide has no mutations or has mutations at any one or more of the amino acids corresponding to amino acids 63 or 106 of there sequence given in ADO44072. The polypeptides of the invention are useful for treating or preventing human papillomavirus (HPV)-associated cancers, such as cervical cancer. The fusion proteins and nucleic acids encoding the fusion proteins are useful for generating
                                                                                                                                                                                                                                                                                                                                                                                                                                         New polypeptide comprising human papillomavirus E6 and E7 polypeptides, useful for treating or preventing human papillomavirus (HPV)-associated cancers, e.g. cervical cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human papillomavirus type 16.
Synthetic.
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                                                                                                                                                                                                                                                                                                                                                                                 Claim 1; Page 76-77; 101pp; English
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   in; E7 protein; fusion protein; HPV16; HPV-associated cancer; cancer; immune response; lower gastrointestinal tract cancer
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Best Local
Methods have been developed for distinguishing a subset of human papilloma virus (HPV) that is associated with an increased risk of developing cervical dysplasia or cervical cancer. The methods involve: (1) preparing a cervical sample to expose any HPV-16 E6 gene in the sample and determining if the base at position 350 of the E6 gene (see AAT94723 and AAT94724 for comparison) is T or G, where the presence of
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(AAW35741)"
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Pred. No. 4.2e-84;
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                                                                                                                                                                                         New polypeptide comprising human papillomavirus E6 and useful for treating or preventing human papillomavirus cancers, e.g. cervical cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                E6 protein; E7 protein; fusion protein; HPV16; HPV-associated of cervical cancer; immune response; lower gastrointestinal tract anal cancer; reproductive system cancer; penile cancer; vulvar
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                                                                                                                                                                                                                                                                                                                                                                                         Cassetti
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98.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            type 16
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Pred. No. 4.6e-84;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               fusion
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                                                                                                                                                                                                                         E7 polypeptides, (HPV) -associated
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The present sequence represents an E6E7 fusion protein, comprising wild type E6 and E7 polypeptides from human papillomavirus type 16 (HPV16). The specification describes human papillomavirus E6 and E7 polypeptides where the E7 polypeptides where the E7 polypeptides at any one or more of the amino

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                                                                                                                                                                                                                                                                                   New nucleic acid molecules encoding a fusion polypeptide comprising an antigen, a signal peptide, and a heat shock protein, useful as a vaccine for inducing or enhancing immune response or for inhibiting or preventing tumor growth.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               05-MAY-2004; 2004WO-US013756.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             vaccine; MHC
E7 protein; E
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human papillomavirus type 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       05-MAY-2003;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AVXDKCLKFYSKISEYRHYCYSVYGTTLEQQYNKPLCDLLIRCINXQKPLCPEEKQRHLD
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                C class I pathway;
E6 protein.
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Pred. No. 7.7e-84;
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encodes a fusion polypeptide which is useful as a vaccine composition. The nucleic acid of the invention contains: a first nucleic acid encoding a polypeptide that promotes processing via the MHC class I pathway; a second sequence encoding a signal peptide; and a third sequence encoding an antigenic polypeptide. The DNA vaccine of the invention is useful for inducing or enhancing an antigen specific immune response, or to inhibit

Sequence

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invention comprises a nucleic acid molecule (DNA vaccine) that

Disclosure;

SEQ ID NO 5;

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                                               The peptide is the sequence of the human papillomavirus HPV 16 E6 nucleoprotein. Peptides corresponding to regions (pref. epitopic regions) of HPV 16 E6 were synthesised by standard Merrifield synthesis. Examples contg. these peptides are E6 1-20, 8-20, 119-134 or 148-158. Compositions contg. these peptides, antibodies against the peptides, or recombinant cells contg. the gene encoding the immuno- genic peptides may be utilised in methods for inhibiting and treating HPV infection and tumour initiation and progression e.g. in the prevention or retardation of cervical warts and cervical carcinoma resulting from HPV infection. See also AAR22767. (Updated on 25-MAR-2003 to correct PA field.) (Updated on
                                                                                                                                                                                                                                                                                                                                                                                                                              Immunogenic peptide(s) derived from E6 or E7 region of HPV16 - recombinant cells encoding them, useful in treatment and prophy cervical warts or cancer resulting from HPV infection.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              growth or prevent re-growth of a tumor expressing Human papillomavirus (HPV) E7 or E6 protein. The present amino acid sequence represents a human papillomavirus type 16 (HPV16) E6 protein of the invention.
                                                                                                                                                                                                                                                                                                                                                                                    Disclosure;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 1992-132119/16
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Chen L,
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98.0%;
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Pred. No. 9.2e-84;
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Matches
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           The present invention describes an agent used in the treatment or prophylaxis of a disease caused or exacerbated by MFV (mammalian papillomavirus) comprising a compound capable of reducing, inhibiting or otherwise decreasing the activity of a protein encoded by an MFV gene by facilitating disruption of a chelated metal cation domain present in the protein. An agent of the present invention can be used to treat cervical cancer or its HFV associated precursor lesions or other HFV associated cancers and/or warts. The present sequence represents a human papillomavirus E6 protein containing two zinc finger motifs, as given in the exemplification of the present invention
                                                                                                                                                                                        Polysulfide and dithionodisulfide agents, useful for the treatment or prophylaxis of diseases caused by mammalian papillomavirus, are disruptors of a chelated metal cation domain in an MPV gene encoded
                                                                                                                                                                                                                                                                                                                               04-SEP-1998;
15-JUL-1999;
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                                                                                                                                                                                                                                                                 Tan YJ,
                                                                                                                                                   Fig 1; 78pp;
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99AU-00001645.
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Pred. No. 9.7e-84;
1; Mismatches 2
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The present invention describes an isolated prepared human papillomavirus (HPV) epitope (I). (I) has antiviral activity, and can be used in vaccine production. Peptides and corresponding nucleic acid compositions from the present invention are useful for stimulating an immune response to HPV by stimulating the production of CTL or HTL responses, specifically in the treatment or prophylaxis of HPV infection, in persons who have not manifested symptoms e.g. genital warts or neoplastic growth. The peptides can also be used in a tetramer staining assay to assess peripheral blood mononuclear cells for the presence of antigen-specific CTLs following exposure to a pathogen or immunogen, and as reagents to evaluate immune recall responses or evaluate the efficacy of a vaccine. The vaccine compositions are useful for removing warts or treating HPV infections. The epitopes for inclusion in an epitope-base vaccine may be selected from conserved regions of viral or tumour-associated antigens, which reduces the likelihood of escape mutants, also immunosuppressive epitopes that may be present in whole antigens can be avoided with the use of epitope-base vaccines. An additional advantage is the ability to combine selected epitopes (CTL and HTL) and to modify the composition of the
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human papillomavirus; human leukocyte antigen; HLA; immune reepitope; T cell; identification; vaccine; infection; genital neoplastic growth; antiviral.
                                                                                                                                                                                                                                                                                                                                                               An isolated human papilloma virus
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15-AUG-2000;
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                                                                                                                                                                                                                                                                                                                                                                                                                                Sidney J,
                                                                                                                                                                                                                                                                                                                 Page 20-21; 756pp; English.
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Pred. No. 9.7e-84;
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Best Local (
                                                  The invention relates to a novel purified complex comprising a first polypeptide and a second polypeptide, where the polypeptides comprise defined amino acid sequences listed in the specification, and where the first polypeptide binds to the second polypeptide. A complex of the invention has virucide and cytostatic activity, and may have a use as a vaccine. The complex is useful for identifying agents for treating or preventing a conditions involving altered level of the complex, e.g. human papilloma virus (HPV) infection, or cancer. The compositions, antibodies, vectors and methods are useful for treating such diseases.
                                                                                                                                                                                                                                                                                                                                                                                             New purified complex comprising a first polypeptide and a second polypeptide, useful for identifying agents for treating/preventing condition involving altered level of the complex e.g. human papillo virus infection, or cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human papillomavirus.
                                                                                                                                                                                                                                                                                                                                           Example 3;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Jackson A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      14-FEB-2002; 2002US-0356911P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               human papilloma virus;
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                                The sequences
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Pred. No. 9.7e-84;
1; Mismatches 2;
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                                                 The invention comprises a nucleic acid molecule (DNA vaccine) that encodes a fusion polypeptide which is useful as a vaccine composition. The nucleic acid of the invention contains: a first nucleic acid encoding a polypeptide that promotes processing via the MHC class I pathway; a second sequence encoding a signal peptide; and a third sequence encoding an antigenic polypeptide. The DNA vaccine of the invention is useful for inducing or enhancing an antigen specific immune response, or to inhibit growth or prevent re-growth of a tumor expressing Human papillomavirus (HPV) E7 or E6 protein. The present amino acid sequence represents a human papillomavirus type 16 (HPV16) E6 protein of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New nucleic acid molecules encoding a fusion polypeptide comprising an antigen, a signal peptide, and a heat shock protein, useful as a vaccine for inducing or enhancing immune response or for inhibiting or preventing
                                                                                                                                                                                                                                                                                                                                                                                                           Claim 11; SEQ ID NO 4; 67pp; English.
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Matches 148; Query Match

Conservative

Local Similarity

99.2%;

Score 823; DB 8; Pred. No. 9.7e-84;

Length 158;

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RESULT 14
AEA40817
ID AEA44
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                                                                                                                                       The invention relates to a novel nucleic acid composition useful as an CC immunogen. The composition comprises a combination of: a first nucleic acid vector comprising a first sequence encoding an antigenic polypeptide or peptide, and optionally, a second sequence linked to the first compositionally, a second sequence linked to the first composition and a second nucleic acid vector encoding an anti-apoptotic polypeptide. CC and a second vector is administered with the first vector to a subject, a T cell mediated immune response to the antigenic polypeptide or subject, a T cell mediated immune response to the antigenic polypeptide or immune response to the antigenic polypeptide or immune response in a magnitude and/or duration than an immune response induced by administration of the first vector alone. CC minimune response induced by administration of the first vector alone or introduction into a cell or an animal by particle composition; a pharmaceutical composition capable of inducing or composition; a pharmaceutical composition capable of inducing or enhancing an antigen specific immune response, comprising the particle and carrier or an excipient; inducing or enhancing an antigen specific immune response in a subject; increasing the numbers of CDs+ CTLs specific for a selected desired antigen in a subject; and inhibiting the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ₩u T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           24-FEB-2003; 2003US-0449429P.
18-JUL-2003; 2003US-0488527P.
31-DEC-2003; 2003US-0533792P.
                                                                                growth of a tumor in a subject. The nucleic acid composition is useful as an immunogen for inhibiting the growth of a tumor, hence it has
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New nucleic acid composition comprising a first nucleic acid vector encoding an antigenic polypeptide and a second nucleic acid vector encoding an anti-apoptotic polypeptide, useful as an immunogen for inhibiting the growth of a tumor.
                                               cytostatic ac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Disclosure; SEQ ID NO 7; 158pp; English
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ANK; NC_001526.
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                                               represents ananti-apoptotic vector HPV
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RESULT 15
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       The invention relates to an antibody composition comprising a mixture of compocional antibodies that specifically bind to 86 proteins of human compatible and virus (HPV) strains 16, 18, 31, 33 and 45, where at least one of the monoclonal antibodies specifically binds to 86 proteins of at compatible composition three different oncogenic HPV strains. Also included are a compatible compatible compatible composition above), a method of detecting an HPV E polypeptide in a sample, composition in a sample, a method of detecting the presence of an oncogenic HPV 86 polypeptide in a sample (comprising the concogenic HPV 86 polypeptide in a sample (comprising the concogenic HPV 86 polypeptide in a sample (comprising a composition above), and the presence of an oncogenic HPV 86 polypeptide in a sample (comprising a composition and binding partner is a PDZ domain protein and the second binding partner is an antibody that specifically binds to the 86 proteins of a least three different oncogenic HPV second composition, kit, methods, and system are useful for diagnosing cancer, composition, kit, methods, and system are useful for diagnosing cancer, composition and concernation of the composition and concernation of the composition and concernation of composition and concernation of composition and concernation on the composition and concernation of composition, kit, methods, and system are useful for diagnosing cancer, concernation of concernati
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                                                                                                                                                                                                                                                                                                                                                                                                                           Disclosure; SEQ ID NO 13; 161pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New antibody composition comprising a mixture of monoclonal antibodies for oncogenic strains of human papilloma virus, useful for diagnosing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2005-457781/46
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Papillomavirus infection; virucide; E6 cancer; cervix tumor; cytostatic.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Garman JD,
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Pred. No. 9.7e-84;
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Search completed: June Job time : 223.345 secs		68	Qy 61 AV	Db 8 MF	Qy 1 MF	Query Match Best Local Similarity 98. Matches 148; Conservative	SQ Sequence 158 AA;
d: June 6, 2006, 12:04:34 345 secs	KKQRFHNIRGRWTGRCMSCCRSSRTRRETQL 158	AVCDKČLKFYSKISEYRHYČYSLYGTTLEQQYNKPLČDLLIRČINCQKPLĆPĖEKORHLD 127 KKOBFHNITEGDWTGECNECCETEBETTOI. 151	61 AVXDKCLKFYSKISEYRHYCYSVYGTTLEQQYNKPLCDLLIRCINXQKPLCPEEKQRHLD 120	MPQDPQERPRKLPQLCTELQTTIHDIILECVYCKQQLLRREVYDFAFRDLCIVYRDGNPY 67	MFQDPQERPRKLPQLCTELQTTIHDIILECVYCKQQLLRREVYDFAFRDLCIVYRDGNPY 60	99.2%; Score 823; DB 9; Length 158; milarity 98.0%; Pred. No. 9.7e-84; Conservative 1; Mismatches 2; Indels 0; Gaps 0;	58 AA;

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Result
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Maximum DB seq length: 2000000000
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    Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 Issued Patents AA:*
1: /EMC Celerra SIDS3/ptodata/2/iaa/5 COMB.pep:*
2: /EMC Celerra SIDS3/ptodata/2/iaa/6 COMB.pep:*
3: /EMC_Celerra_SIDS3/ptodata/2/iaa/7 COMB.pep:*
4: /EMC_Celerra_SIDS3/ptodata/2/iaa/H COMB.pep:*
5: /EMC_Celerra_SIDS3/ptodata/2/iaa/PCTUS_COMB.pep:*
6: /EMC_Celerra_SIDS3/ptodata/2/iaa/RE_COMB.pep:*
7: /EMC_Celerra_SIDS3/ptodata/2/iaa/RE_COMB.pep:*
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length DB
    GenCore version 5.1.9 (c) 1993 - 2006 Biocceleration Ltd.
US-09-763-616-1
US-08-816-239B-3
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US-09-485-885-6
US-09-485-885-16
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US-09-485-885-16
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US-08-860-165-12
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US-08-860-165-12
US-08-860-165-14
US-09-359-382-14
US-09-359-382-14
US-08-117-083-14
US-08-117-083-14
US-08-117-083-14
US-08-117-083-14
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US-09-980-523A-2
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115	115	115	119	119	119	120	124	128	130	134.5	159	163	163	304	304	304	304	304
13.9	13.9	13.9	14.3	14.3	14.3	14.5	14.9	15.4	15.7	16.2	19.2	19.6	19.6	36.6	36.6	36.6	36.6	36.6
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US-08-164-768-2	US-08-466-285-2	US-08-934-915-166	US-09-913-204-13	US-09-913-204-7	US-09-913-204-3	US-08-934-915-167	US-09-980-523A-6	US-09-601-729-276	US-09-980-523A-10	US-09-913-204-17	US-09-980-523A-8	US-09-980-523A-4	US-08-363-586-4	US-10-011-749-46	US-09-000-094-46	US-10-011-749-24	US-09-000-094-24	US-10-011-749-22
Sequence 2, Appli	Sequence 2, Appli	Sequence 166, App	Sequence 13, Appl	Sequence 7, Appli	Sequence 3, Appli	Sequence 167, App	Sequence 6, Appli	Sequence 276, App	Sequence 10, Appl	Sequence 17, Appl	Sequence 8, Appli	Sequence 4, Appli	Sequence 4, Appli	Sequence 46, Appl	Sequence 46, Appl	Sequence 24, Appl	Sequence 24, Appl	Sequence 22, Appl

ALIGNMENTS

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RESULT 1
US-08-316-239B-4
US-08-316-239B-4
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/316,239B
FILING DATE: 30-SEP-1994
CLASSIFICATION: 435
ATTORMEZ/AGENT INFORMATION:
NAME: Jagtiani, Ajay A.
REGISTRATION NUMBER: 35,205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 4, Application US/08316239B Patent No. 5679509
                                                                                                                                                                                                                                                                                          TELEPHONE: (703) 817-9453
TELEPAX: (703) 803-9387
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 162 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
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                                               MOLECULE TYPE:
HYPOTHETICAL:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE/DOCKET NUMBER: UN
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CORRESPONDENCE ADDRESS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STREET: 6120 CONTRY: Centreville
                                                                                                                                                                                            TYPE: amino acid
STRANDEDNESS: no
                                                                                                                                                       TOPOLOGY:
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6126 Rocky Way Court
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Sequence Sequence Sequence Sequence Sequence Sequence

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Query Match
Best Local Similarity
Matches 149; Conserv

Conservative

99.5%;

Score 826; DB 1; L Pred. No. 8.2e-86;

Length 162; Indels

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Sequence Sequence

Sequence

Sequence Sequence

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APPLICANT: CHOPPIN, JEANNINE
APPLICANT: BOURGAULT VILLADA, ISABELLE
APPLICANT: BOURGAULT VILLADA, ISABELLE
APPLICANT: GUILLET, JEAN-GERARD
APPLICANT: CONNAN, FRANCINE
APPLICANT: CONNAN, FRANCINE
APPLICANT: PERRIES, ESTELLE
APPLICANT: PERRIES, ESTELLE
APPLICANT: PERRIES, ESTELLE
APPLICANT: PERRIES, ESTELLE
APPLICANTION PROTEINS OF HPV, THEIR PRODUCTION AND THEIR USE
TITLE OF INVENTION: PROTEINS OF HPV, THEIR PRODUCTION AND THEIR USE
TITLE OF INVENTION: PARTICULARLY IN VACCINATION
FILE REFERENCE: WOB1 AO INVENER: US/09/980,523A
CURRENT APPLICATION NUMBER: PST/FR00/01513
PRIOR APPLICATION NUMBER: PST/FR00/01513
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                                                                                                                                                                                                                                                                                                                                                                RESULT 3
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APPLICANT: TAN, YEE JOO
APPLICANT: BEERHEIDE, WALTER
APPLICANT: TING, ANTHONY EUGENE
APPLICANT: SIM, MUI MUI
TITLE OF INVENTION: THERAPEUTIC COMPOUNDS AN
FILE REFERENCE: BERN3001/JDB
CURRENT APPLICATION NUMBER: US/09/763,616
CURRENT FILING DATE: 2001-05-16
PRIOR APPLICATION NUMBER: PCT/AU99/00724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-09-980-523A-2
                                                                                                                            GENERAL INFORMATION:
APPLICANT: BERNARD, HANS-ULRICH
APPLICANT: TAN, YEE JOO
APPLICANT: BEERHEIDE, WALTER
APPLICANT: TING, ANTHONY EUGENI
APPLICANT: SIM, MUI MUI
                                                                                                                                                                                                                                                                                   Sequence 1, Application US/09763616 Patent No. 7019000
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Best Local Similarity 98.0%;
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SOFTWARE: PatentIn Ver. 2.1
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TYPE: PRT
ORGANISM: Human Papillomavirus
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          121 KKORFHNIRGRWTGRCMSCCRSSRTRRETQL 151
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Pred. No. 1.7e-85;
                                                                                                         AND METHODS
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; LENGTH: 158
; TYPE: PRT
; ORGANISM: Human papillomavirus type 16
US-09-763-616-1
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COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOTTWARE: PatentIn Release #1.0, Version #1.
CURRENT APPLICATION DATA:
"PDRITTATION NUMBER: US/08/316,239B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GENERAL INFORMATION:
APPLICANT: Wheeler, C
APPLICANT: Parmenter,
TITLE OF INVENTION: F
TITLE OF INVENTION: F
TITLE OF INVENTION: C
TITLE OF INVENTION: C
TITLE OF INVENTION: C
TITLE OF INVENTION: C
TITLE OF SEQUENCES:
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Patent No. 5679509
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                                                                                                                  TELEFAX: (703) 803-9387 INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NUMBER OF SEQ ID NOS: 2
SOFTWARE: PatentIn Ver. 2.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR FILING DATE: 1999-09-03
PRIOR APPLICATION NUMBER: AU PQ1645/99
PRIOR FILING DATE: 1999-07-15
PRIOR APPLICATION NUMBER: AU PP5733/98
PRIOR FILING DATE: 1998-09-04
                                                                                                                                                                           ATTORNEY/AGENT INFORMATION:
NAME: Jagtiani, Ajay A.
REGISTRATION NUMBER: 35,205
REFERRNCE/DOCKET NUMBER: UNME
TELECOMMUNICATION INFORMATION:
TELEPHONE: (703) 817-9453
  TOPOLOGY: no MOLECULE TYPE: HYPOTHETICAL: 1
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CITY: Centreville
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Local Similarity 98.0%;
                                                         TYPE: amino acid
STRANDEDNESS: not
                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: US/0 FILING DATE: 30-SEP-1994 CLASSIFICATION: 435
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STREET: 6126 Rocky Way Court
                                                                                                  LENGTH:
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                                                                                                  162 amino acids
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VENVIION: Methods and a Diagnostic Aid for

VENVIION: Distinguishing a Subset of HPV that is Associated with

VENVIION: Increased Risk of Developing Cervical Dysplasia and

VENVIION: Cervical Cancer
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                                        not relevant
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. protein
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Pred. No. 1.7e-85;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              158
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RESULT 6
US-09-359-382-10
; Sequence 10, Application US/09359382
; Patent No. 6306397
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US-08-860-165-10
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GENERAL INFORMATION:
APPLICANT: EDWARDS, Stirling John
APPLICANT: COX, John Cooper
APPLICANT: WEBB, Elizabeth Ann
APPLICANT: FRAZER, Ian
TITLE OF INVENTION: VARIANTS OF H
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITLE OF INVENTION: VARIANTS OF HUMAN PAPILLOMA VIRUS ANTIGENS
FILE REFERENCE: 1727/130
CURRENT APPLICATION NUMBER: US/08/860,165A
CURRENT FILING DATE: 1997-09-22
EARLIER APPLICATION NUMBER: PCT/AU95/00868
EARLIER FILING DATE: 1995-12-20
EARLIER APPLICATION NUMBER: AU PN0157
EARLIER APPLICATION NUMBER: AU PN0157
EARLIER APPLICATION NUMBER: AU PN0157
EARLIER FILING DATE: 1994-12-20
NUMBER OF SEQ ID NOS: 15
SOFTWARE: PATENTIN VET. 2.0
SEQ ID NO 10
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APPLICANT: CCX, John Cooper
APPLICANT: WEBB, Elizabeth Ann
APPLICANT: FRAZER, Ian
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                                                                                                                                                                                                                             121 KKQRFHNIRGRWTGRCMSCCRSSRTRRETQL 151
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                                                                                                                                                                                                                                                                                                                                                                       MFQDPQERPRKLPQLCTELQTTIHDIILECVYCKQQLLRRBVYDFAFRDLCIVYRDGNPY
                                                                                                                                                                                                                                                                                                                                                 MFQDPQERPRKLPQLCTELQTTIHDIILECVYCKQQLLRREVYDFAFRDLCIVYRDGNPY
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 VARIANTS OF HUMAN PAPILLOMA VIRUS ANTIGENS
                                                                                                                                                                                                                                                                                                                                                                                                                                  99.2%;
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98.0%;
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Pred. No. 3.2e-85;
1; Mismatches 2;
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Pred. No. 1.8e-85;
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CURRENT APPLICATION NUMBER: US/09/359,382
CURRENT FILING DATE: 1999-07-23
EARLIER APPLICATION NUMBER: US 08/860,165
EARLIER FILING DATE: 1997-09-22
EARLIER APPLICATION NUMBER: PCT/AU95/00868
EARLIER FILING DATE: 1995-12-20
EARLIER FILING DATE: 1995-12-20
EARLIER FILING DATE: 1994-12-20
EARLIER FILING DATE: 1994-12-20
NUMBER: OF SEQ ID NOS: 27
                                                                                                                                                                                                                                                                                               SEQ ID NO 1
LENGTH: 266
TYPE: PRT
ORGANISM: Human papillomavirus type 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 1, Application US/09367309A
PATENT NO. 6428807
GENERAL INFORMATION:
APPLICANT: MACFARLAN, RODERICK I.
APPLICANT: MALLIAROS, JIM
TITLE OF INVENTION: CHELATING IMMUNOSTIMULATING
FILE REFERENCE: 017227/0149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SOFTWARE: PatentIn Ver. 2.0 SEQ ID NO 10
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                                                                                                                                                                                                                                         Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                CURRENT APPLICATION NUMBER: US/09/367,309A CURRENT FILING DATE: 199-08-11 PRIOR APPLICATION NUMBER: PCT/AU98/00080 PRIOR FILING DATE: 1998-02-13 PRIOR APPLICATION NUMBER: AU PO 5178 PRIOR FILING DATE: 1997-02-19
                                                                                                                                                                                                                                                                                                                                                                              SOFTWARE: PatentIn Ver.
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ORGANISM: Human papillomavirus type
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LENGTH: 266
                                                                                                                                                                                           99.2%;
Local Similarity 98.0%;
les 148; Conservation
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121 KKQRFHNIRGRWTGRCMSCCRSSRTRRETQL 151
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                                                  68 AVCDKCLKFYSKISEYRHYCYSLYGTTLEQQYNKPLCDLLIRCINCQKPLCPEEKQRHLD
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                                                                                                                        8 MFQDFQERPRKLPQLCTELQTTIHDIILECVYCKQQLLRREVYDFAFRDLCIVYRDGNPY
                                                                                                                                                1 MFQDFQERPRKLFQLCTELQTTIHDIILECVYCKQQLLRREVYDFAFRDLCIVYRDGNFY
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                                                                        AVXDKCLKFYSKISEYRHYCYSVYGTTLEQQYNKFLCDLLIRCINXQKFLCPEEKQRHLD
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98.0%;
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Pred. No. 3.2e-85;
1; Mismatches 2
                                                                                                                                                                                                   Score 823; DB 2; 1
Pred. No. 3.2e-85;
1; Mismatches 2;
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KKORFHNIRGRWTGRCMSCCRSSRTRRETQL 158

RESULT 8 US-09-485-885-4

Application US/09485885

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; SEQ ID NO 10
; LENGTH: 292
; TYPE: PRT
; ORGANISM: Homo sapien
US-09-485-885-10
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; SEQ ID NO 4

; LENGTH: 273

; TYPE: PRT

; ORGANISM: Homo sapien

US-09-485-885-4
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APPLICANT: Bruck, Claudine
APPLICANT: Cabezon Silva, Te
APPLICANT: Cabezon Servana
APPLICANT: Delisse, Anne-Mar
APPLICANT: Lombardo-Benchell
APPLICANT: Lombardo-Benchell
APPLICANT: Lombardo-Benchell
APPLICANT: Lombardo-Benchell
APPLICANT: Lombardo-Benchell
APPLICANT: Lombardo-Benchell
APPLICANT: Marchell
APPLICANT: Lombardo-Benchell
APPLICAN
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Patent No. 634222
GENERAL INFORMATI
Matches
                                          Best Local Similarity
                                                                        Query Match
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Best Local Similarity 98.0
Matches 148; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CURRENT APPLICATION NUMBER: US/09/485,885
CURRENT FILING DATE: 2000-02-18
PRIOR APPLICATION NUMBER: PCT/EP98/05285
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GENERAL INFORMATION:
APPLICANT: Bruck, Claudine
APPLICANT: Cabezon Silva, Teresa
APPLICANT: Delisse, Anne-Marie Eva Fernande
APPLICANT: Gerard, Catherine Marie Ghislaine
APPLICANT: Lombardo-Bencheikh, Angela
TITLE OF INVENTION: Vaccine
FILE REFERENCE: B45107
                                                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION NUMBER: PCT/EP98/052
PRIOR FILING DATE: 1998-08-17
PRIOR APPLICATION NUMBER: B 9717953.5
PRIOR FILING DATE: 1997-08-22
NUMBER OF SEQ ID NOS: 23
SOFTWARE: FastSEQ for Windows Version
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CURRENT FILING DATE: 2000-02-18
PRIOR APPLICATION NUMBER: PCT/EP98/05285
PRIOR FILING DATE: 1998-08-17
PRIOR APPLICATION NUMBER: GB 9717953.5
PRIOR FILING DATE: 1997-08-22
PRIOR FILING DATE: 1997-08-22
NUMBER OF SEQ ID NOS: 23
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   148;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          KKORFHNIRGRWTGRCMSCCRSSRTRRETQL 264
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Dellsse, Anne-Marie Eva Fernande
Gerard, Catherine Marie Ghislaine
Lombardo-Bencheikh, Angela
       Conservative
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                                  99.2%;
98.0%;
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Pred. No. 3.3e-85;
1; Mismatches 2
       1;
Score 823; DB 2;
Pred. No. 3.6e-85;
1; Mismatches 2
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                                                                     Length 292;
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; SEQ ID NO 6
; LENGTH: 371
; TYPE: PRT
; ORGANISM: Homo sapien
US-09-485-885-6
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APPLICANT: Cabezon Silva, Teresa
APPLICANT: Celsse, Anne-Marie Eva Fernande
APPLICANT: Delisse, Anne-Marie Eva Fernande
APPLICANT: Gerard, Catherine Marie Ghislaine
APPLICANT: Lombardo-Bencheikh, Angela
TITLE OF INVENTION: Vaccine
FILE REFERENCE: B45107
CURRENT APPLICATION NUMBER: US/09/485,885
CURRENT APPLICATION NUMBER: US/09/485,885
CURRENT FILING DATE: 1998-08-17
PRIOR FILING DATE: 1998-08-17
PRIOR APPLICATION NUMBER: GB 9717953.5
PRIOR FILING DATE: 1997-08-22
NUMBER OF SEQ ID NOS: 23
SOFTWARE: FASTSEQ for Windows Version 3.0
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US-09-485-885-14
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US-09-485-885-6
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                                                                                                                                                                                                                                                                   Sequence 14, Application US/09485885 Patent No. 6342224
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Patent No. 6342224
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
                                                                                                                     GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Bruck, Claudine
APPLICANT: Cabezon Silva, Teresa
APPLICANT: Delisse, Anne-Marie Eva Fernande
APPLICANT: Gerard, Catherine Marie Ghislaine
APPLICANT: Lombardo-Bencheikh, Angela
FILE REFERENCE: B45107
CURRENT APPLICATION NUMBER: US/09/485,885
CURRENT FILING DATE: 2000-02-18
PRIOR APPLICATION NUMBER: PCT/EP98/05285
PRIOR FILING DATE: 1998-08-17
                                                                                                              TITLE OF INVENTION:
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                                                                                                            Vaccine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                99.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1; Mismatches
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Pred. No. 4.8e-85;
                                                                                                                                                                                                                                                                                                                                                                                                                                            151
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; PRIOR APPLICATION NUMBER: (
; PRIOR FILING DATE: 1997-08-
; NUMBER OF SEQ ID NOS: 23
; SOFTWARE: PASUSEQ for Wind.
; SEQ ID NO 14
; SEQ ID NO 14
; LENGTH: 390
; TYPE: PRT
; ORGANISM: Homo sapien
US-09-485-885-14
                                                                                                                                                     RESULT 13
US-09-462-993-1
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US-09-701-080C-18
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Sequence 1, Application US/09462993
Patent No. 6884786
GENERAL INFORMATION:
APPLICANT: KIENY, Marie-Paule
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APPLICANT: INSTITUTE OF MOLECULAR AND CELL BIOLOGY
TITLE OF INVENTION: POLYPEPTIDES FROM CREB BINDING PROTEIN AND RELATED PROTEIN P300
TITLE OF INVENTION: TRANSCRIPTIONAL REGULATION
FILE REFERENCE: N73477C GCW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 98.6%; Score 818; DB 2; Length 151; Best Local Similarity 97.4%; Pred. No. 6.1e-85; Matches 147; Conservative 1; Mismatches 3; Indels
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Best Local Similarity 98.0
Matches 148; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LENGTH: 151
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98.0%;
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CURRENT APPLICATION NUMBER: US/08/860,165A
; CURRENT FILING DATE: 1997-09-22
; EARLIER APPLICATION NUMBER: PCT/AU95/00868
; EARLIER FILING DATE: 1995-12-20
; EARLIER APPLICATION NUMBER: AU PN0157
EARLIER FILING DATE: 1994-12-20.
; NUMBER OF SEQ ID NOS: 15
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 12
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                                                                                   ; OTHER INFORMATION: Description of Artificial Sequence: Gene Fusion US-08-860-165-12
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US-08-860-165-12
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APPLICANT: EDWARDS, Stirling John
APPLICANT: COX, John Cooper
APPLICANT: WEBB, Elizabeth Ann
APPLICANT: FRAZER, Ian
TITLE OF INVENTION: VARIANTS OF HUMAN PAPILLOMA VIRUS ANTIGENS
FILE REFERENCE: 17227/130
  Best Local
Matches !
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Best Local Similarity
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                                         Query Match
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FRATURE:
OTHER INFORMATION: Description of Artificial Sequence:Derivated from OTHER INFORMATION: human papillomavirus, strain HPV-16, E6 protein OTHER INFORMATION: fused F protein signals, clone E6*TMF.
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                                                                                                                           TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
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  | Similarity
| 92; Conser
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BIZOUARNE, Nadine
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                 62.5%;
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Score 519; DB 2; Length 172; Pred. No. 5.7e-51; Mismatches 2; Indels
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Pred. No. 2.5e-80;
1; Mismatches 2
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57 GNPYAVXDKCLKFYSKISEYRHYCYSVYGTTLEQQYNKFLCDLLIRCINXQKFLCPEEKQ

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GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: EDMARDS, Stirling John
APPLICANT: WEBB, Elizabeth Ann
APPLICANT: WEBB, Elizabeth Ann
APPLICANT: FRAZER, Ian
ITILE OF INVENTION: VARIANTS OF HUMAN PAPILLOMA VIRUS ANTIGENS
FILE REFERENCE: 017227/0148
CURRENT APPLICATION NUMBER: US/09/359,382
CURRENT FILING DATE: 1999-07-23
EARLIER APPLICATION NUMBER: US 08/860,165
EARLIER FILING DATE: 1997-09-22
EARLIER APPLICATION NUMBER: PCT/AU95/00868
EARLIER FILING DATE: 1995-12-20
EARLIER FILING DATE: 1995-12-20
NUMBER OF SEQ ID NOS: 27
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 12
LENGTH: 172
TYPE: PRT
ORGANISM: Human papillomavirus type 16
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US-09-359-382-12
Sequence 12, Application US/09359382
Patent No. 6306397
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Search completed: June 6, Job time: 45.2691 secs
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                                                                                                          117 RHLDKKQRFHNIRGRWTGRCMSCCRSSRTRRETQL 151
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Perfect score:
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       Score
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Maximum Match 100%
Listing first 45 summaries
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| / RMC_Celerra_SIDS3/ptodata/2/pubpaa/US08_PUBCOMB.pep:*
| / RMC_Celerra_SIDS3/ptodata/2/pubpaa/US08_PUBCOMB.pep:*
| / RMC_Celerra_SIDS3/ptodata/2/pubpaa/US09_PUBCOMB.pep:*
| / RMC_Celerra_SIDS3/ptodata/2/pubpaa/US10B_PUBCOMB.pep:*
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US-10-484-063-27

US-10-530-253-13

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US-10-530-253-13

US-10-367-057-16

US-11-201-949-13

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US-11-206-138-3

US-11-206-138-3

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US-10-472-724-2

US-10-530-253-1

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Publication No. US20060014926A1

GENERAL INFORMATION:
APPLICANT: Cassetti, Maria C.
APPLICANT: Smith, Larry
APPLICANT: Jeffrey K. Pullen
APPLICANT: Susan P. McElhiney
ITILE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
FILE REPERENCE: 00630/100M137-US2
CURRENT APPLICATION NUMBER: US/10/530,253
CURRENT FILING DATE: 2005-04-04
PRIOR APPLICATION NUMBER: PCT/US2003/031726
PRIOR APPLICATION NUMBER: PCT/US2003/031726
PRIOR FILING DATE: 2003-10-02
PRIOR FILING DATE: 2003-10-03
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US-10-530-253-3
Sequence 5, Application US/10530253
Publication No. US20060014926A1
GENERAL INFORMATION:
APPLICANT: Cassetti, Maria C.
APPLICANT: Smith, Larry
APPLICANT: Jeffrey K. Pullen
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ORGANISM: Human
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US-11-021-949-17
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US-11-021-949-361
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APPLICANT: SASTRY, K. JAGANNADHA
APPLICANT: TORTOLERO-LUNA, GUILLERMO
APPLICANT: TORTOLERO-LUNA, GUILLERMO
APPLICANT: FOLLEN, MICHELE
ITITLE OF INVENTION: METHODS AND COMPOSITIONS RELATING TO HPV-ASSOCIATED
ITITLE OF INVENTION: PRE-CANCEROUS AND CANCEROUS GROWTHS, INCLUDING CIN
FILE REFERENCE: UTSC:560US
CURRENT PRILING DATE: 2004-01-16
PRICR PILLING DATE: 2004-01-16
PRIOR APPLICATION NUMBER: PCT/US02/23198
PRIOR APPLICATION NUMBER: 60/306,809
PRIOR PILING DATE: 2002-07-19
PRIOR PILING DATE: 2001-07-20
NUMBER OF SEQ ID NOS: 27
SOFTWARE: PATENTIN Ver: 2.1
SEQ ID NO 20
LENGTH: 151
TYPE: PRI
CORGANISM: Human papillomavirus
US-10-484-063-20
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LENGTH: 248;
; TYPE: PRT;
; ORGANISM: Human papillomavirus type
US-10-530-253-5
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Publication No. US20050048467A1
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TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
FILE REFERENCE: 00630/100M137-US2
CURRENT APPLICATION NUMBER: US/10/530,253
CURRENT FILING DATE: 2005-04-04
PRIOR APPLICATION NUMBER: PCT/US2003/031726
PRIOR PILING DATE: 2003-10-02
PRIOR PILING DATE: 2003-10-03
PRIOR APPLICATION NUMBER: US/60/415,929
PRIOR APPLICATION NUMBER: US 60/415,929
PRIOR PILING DATE: 2003-10-03
NUMBER OF SEQ ID NOS: 65
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                                                                                                         AVXDKCLKFYSKISEYRHYCYSVYGTTLEQQYNKPLCDLLIRCINXQKPLCPEEKQRHLD 120
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Pred. No. 6e-81;
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Pred. No. 6.5e-81;
0; Mismatches 2
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; ORGANISM: Human papillomavirus type US-10-530-253-13
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Query Match
Best Local Similarity
Matches 149; Conserv
                                                                                                                                                                         SOFTWARE: PatentIn version 3.1 SEQ ID NO 13
                                                                                                                                                                                                        APPLICANT: Cassetti, Maria C.
APPLICANT: Smith, Larry
APPLICANT: Smith, Larry
APPLICANT: Susan P. McElhiney
APPLICANT: Susan P. McElhiney
TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
FILE REFERENCE: 00630/100M137-US2
CURRENT APPLICATION NUMBER: US/10/530,253
CURRENT PILING DATE: 2005-04-04
PRIOR APPLICATION NUMBER: PCT/US2003/031726
PRIOR APPLICATION NUMBER: US 60/415,929
PRIOR APPLICATION NUMBER: US 60/415,929
PRIOR FILING DATE: 2002-10-03
NUMBER OF SEQ ID NOS: 65
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LENGTH: 151
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Publication No. US20060014926A1
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Best Local Similarity
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CURRENT FILING DATE: 2004-01-16
PRIOR APPLICATION NUMBER: PCT/US02/23198
PRIOR FILING DATE: 2002-07-19
PRIOR APPLICATION NUMBER: 60/306,809
PRIOR FILING DATE: 2001-07-20
NUMBER OF SEQ ID NOS: 27
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APPLICANT: TORTOLERO-LUNA, GUILLERMO
APPLICANT: FOLLEN, MICHELE
TITLE OF INVENTION: METHODS AND COMPOSITIONS RELATING TO HPV-ASSOCIATED
TITLE OF INVENTION: PRE-CANCEROUS AND CANCEROUS GROWTHS, INCLUDING CIN
FILE REFERENCE: UTSC:560US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SOFTWARE: PatentIn Ver. 2.1
                                                                                                                                  TYPE: PRT
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                                                                                                                                                    LENGTH:
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TORTOLERO-LUNA, GUILI
99.5%;
ilarity 98.7%;
Conservative
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US20050048467A1
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Score 826; DB 5
Pred. No. 6e-81;
0; Mismatches
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Pred. No. 6e-81;
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                                        Length 151;
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US-10-858-384-2
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US-10-530-253-1
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TYPE: PAT
; ORGANISM: Human papillomavirus type
US-10-530-253-1
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GENERAL INFORMATION:

APPLICANT: CHOPPIN, JEANNINE
APPLICANT: BOURGAULT VILLADA, ISABELLE
APPLICANT: GUILLET, JEAN-GERARD
APPLICANT: CONNAN, FRANCINE
APPLICANT: CONNAN, FRANCINE
APPLICANT: CONNAN, FRANCINE
TITLE OF INVENTION: POLYEPITOPIC PROTEIN FRAGMENTS OF THE E6 PROTEIN
TITLE OF INVENTION: OR E7 OF HPV, THEIR PRODUCTION AND THEIR USE
TITLE OF INVENTION: PARTICULARLY IN VACCINATION
FILE REFERENCE: 0508-1037-1
CURRENT APPLICATION NUMBER: US/10/858,384
CURRENT FILING DATE: 2004-06-02
PRIOR APPLICATION NUMBER: FR 9907012
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GENERAL INFORMATION:
APPLICANT: Cassetti, Maria C.
APPLICANT: Smith, Larry
APPLICANT: Smith, Larry
APPLICANT: Smith, Larry
APPLICANT: Susan P. McElhiney
TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
FILE REFERENCE: 0650/100M137-UG2
CURRENT APPLICATION NUMBER: US/10/530,253
CURRENT FILING DATE: 2005-04-04
PRIOR APPLICATION NUMBER: PCT/US2003/031726
PRIOR APPLICATION NUMBER: US 60/415,929
PRIOR APPLICATION NUMBER: US 60/415,929
PRIOR FILING DATE: 2002-10-03
NUMBER OF SEQ ID NOS: 65
SOFTWARE: Patentin version 3.1
SEQ ID NO 1
                                                                                                                                                                                                                                                                                                                        Sequence 2, Application US/10858384
Publication No. US20050033025A1
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Best Local Similarity
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98.7%; Pred. No. 1.1e-80;
tive 0; Mismatches 2
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Sequence 16, Application US/10367057

Publication No. US20050100554A1

GENERAL INFORMATION:
APPLICANT: Cuthill, Scott;
APPLICANT: Jackson, Amanda;
APPLICANT: Lewin, David A.;
APPLICANT: Lewin, David A.;
APPLICANT: Lewin, David A.;
APPLICANT: Ooi, Chean Eng
TITLE OF INVENTION: Complexes and Methods of Using Sam
FILE REFERENCE: 21402-559

CURRENT APPLICATION NUMBER: US/10/367,057

CURRENT APPLICATION NUMBER: 60/256,911

PRIOR APPLICATION NUMBER: 60/256,911

PRIOR APPLICATION DATE: 2003-02-14

PRIOR APPLICATION NUMBER: 60/256,911

PRIOR APPLICATION NUMBER: 60/256,911

PRIOR APPLICATION NUMBER: 003-02-14

INUMBER OF SEQ ID NOS: 198

SOFTWARE: CuraSeqList version 0.1
RESULT 9
US-11-021-949-13
IS-quence 13, Application US/11021949
; Publication No. US20050142541A1
; GENERAL INFORMATION:
; APPLICANT: LU, PETER
; APPLICANT: GARMAN, JONATHAN DAVID
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; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-367-057-16
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TYPE: PRT
; ORGANISM: Human Papillomavirus
US-10-858-384-2
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US-10-367-057-16
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Best Local Similarity 98.0%;
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NUMBER OF SEQ ID NOS: 24
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Pred. No. 1.3e-80;
1; Mismatches 2;
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; LENGTH: 158
; TYPE: PRT
; ORGANISM: human p
US-11-021-949-13
RESULT 11
US-10-472-724-2
; Sequence 2, Application US/10472724
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SOFTWARE: PatentIn version 3.3
SEQ ID NO 3
LENGTH: 158
TYPE: PRT
ORGANISM: Human papillomavirus
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US-11-206-138-3
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APPLICANT: HealthBanks Biotech CO. LTD.
TITLE OF INVENTION: Fusion protein for inhibiting
FILE REFERENCE: P7819/0613
CURRENT APPLICATION NUMBER: US/11/206,138
CURRENT FILING DATE: 2005-08-18
                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
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SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 13
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Best Local Similarity
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APPLICANT: SCHWEIZER, JOHANNES
TITLE OF INVENTION: ANTIBODIES FOR ONCOGENIC STRAINS OF HPV
TITLE OF INVENTION: AND METHODS OF THEIR USE
FILE REFERENCE: VITA-012
CURRENT APPLICATION UNDEER: US/11/021,949
CURRENT FILING DATE: 2004-12-23
CURRENT FILING DATE: 2004-12-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION NUMBER: 60/532,373 PRIOR FILING DATE: 2003-12-23
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                                                                                                                                      121 KKORFHNIRGRWTGRCMSCCRSSRTRRETQL 151
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                                                                                                                                                                                                                                                       MFQDPQERPRKLPQLCTELQTTIHDIILECVYCKQQLLRREVYDFAFRDLCIVYRDGNPY
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      KKQRFHNIRGRWTGRCMSCCRSSRTRRETQL 158
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                                                                                                                                                                                                                                                                                                                                                   99.2%;
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                                                                                                                                                                                                                                                                                                                                 Score 823; DB 6; I
Pred. No. 1.3e-80;
1; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 823; DB 6;
Pred. No. 1.3e-80;
1; Mismatches 2
                                                                                                 158
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PRIOR APPLICATION NUMBER: EP 01107271.7
PRIOR FILING DATE: 2001-03-23
NUMBER OF SEQ ID NOS: 27
SOFTWARE: Patentin version 3.2
SEQ ID NO 2
LENGTH: 171
TYPE: PRI
TYPE: PRI
TYPE: PRI
TYPE: Artificial Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 9, Application US/10530253 Publication No. US20060014926A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                        SEQ ID NO 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Publication No. US20040171806A1
GENERAL INFORMATION:
APPLICANT: Cid-Arregui, Angel
APPLICANT: Zur Hausen, Harald
                                                                                                                   Matches
                                                                                                                                    Query Match
Best Local Similarity
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Best Local !
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CURRENT APPLICATION NUMBER: US/10/530,253
CURRENT FILING DATE: 2005-04-04
PRIOR APPLICATION NUMBER: PCT/US2003/031726
PRIOR EILING DATE: 2003-10-02
PRIOR APPLICATION NUMBER: US 60/415,929
PRIOR FILING DATE: 2002-10-03
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CURRENT APPLICATION NUMBER: US/10/472,724
CURRENT FILING DATE: 2003-09-17
PRIOR APPLICATION NUMBER: PCT/EP02/03271
PRIOR FILING DATE: 2002-03-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Cassetti, Maria C.
APPLICANT: Smith, Larry
APPLICANT: Jeffrey K. Pullen
APPLICANT: Susan P. McElhiney
TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
                                                                                                                                                                                                                                                                                          NUMBER OF SEQ ID NOS: 65
SOFTWARE: PatentIn version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Zur Hausen, Harald
TITLE OF INVENTION: Modified HPV E6 and E7
                                                                                                                                                                                                                                   TYPE: PRT
                                                                                                                                                                                                             ORGANISM: Human papillomavirus type 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURE:
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                                                                         FODPOERPRKLPOLCTELOTTIHDIILECVYCKOOLLRREVYDFAFRDLCIVYRDGNPYA 61
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VXDKCLKFYSKISEYRHYCYSVYGTTLEQQYNKPLCDLLIRCINXQKPLCPEEKQRHLDK 121
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                                    FQDPQERPRKLPQLCTELQTTIHDIILECVYCKQQLLRREVYDPAFRDLCIVYRDGNPYA 158
                                                                                                                 Conservative
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                                                                                                                                                                                                                                                                                            version 3.1
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                                                                                                                 0; Mismatches
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Pred. No. 1.5e-80;
                                                                                                                                  Score 823; DB 5;
Pred. No. 2.2e-80;
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                                                                                                                                                    Length 248;
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US-11-192-923A-2
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US-10-530-253-11
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                                      SEQ ID NO 2
LENGTH: 25
TYPE: PRT
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                                                                                         TITLE OF INVENTION: VIRUS-LIKE PARTICLE CONTAINING A DENGUE VIRUS
TITLE OF INVENTION: RECOMBINANT REPLICON
FILE REFERENCE: 116620-003
CURRENT APPLICATION NUMBER: US/11/192,923A
CURRENT FILING DATE: 2005-07-29
PRIOR APPLICATION NUMBER: CN 03115272.4
PRIOR FILING DATE: 2003-01-30
PRIOR APPLICATION NUMBER: CN 03115273.2
PRIOR PRIOR PRIOR OF SEQ ID NOS: 45
PRIOR FILING DATE: 2003-01-30
NUMBER OF SEQ ID NOS: 45
SOFTWARE: Patentin Ver. 3.3
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CURRENT APPLICATION NUMBER: US/10/530,253
CURRENT FILING DATE: 2005-04-04
PRIOR APPLICATION NUMBER: PCT/US2003/031726
PRIOR FILING DATE: 2003-10-02
PRIOR APPLICATION NUMBER: US 60/415,929
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR FILING DATE: 2002-10-03
NUMBER OF SEQ ID NOS: 65
SOFTWARE: PatentIn version 3.1
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APPLICANT: Smith, Larry
APPLICANT: Smith, Larry
APPLICANT: Jeffrey K. Pullen
APPLICANT: Susan P. McElhiney
APPLICANT: Susan P. McElhiney
APPLICANT: Susan P. McElhiney
APPLICANT: Susan P. McElhiney
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: PRT ORGANISM: Human papillomavirus type
              ORGANISM: Human papillomavirus
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Pred. No. 2.2e-80;
0; Mismatches 2; Indels
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Search completed: June 6, Job time: 164.341 secs

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US-09-367-309A-1
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SEQ ID NO 1
LENGTH: 266
TYPE: PRT
ORGANISM: Human papillomavirus type
                                                                                                                                                                                                                                 Matches 148;
                                                                                                                                                                                                                                                  Query Match
Best Local Similarity
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Publication No. US20020081329A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches 148;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: MACFARLAN, RODERICK I.
APPLICANT: MALLIAROS, JIM
TITLE OF INVENTION: CHELATING IMMUNOSTIMULATING COMPLEXES
FILE REFERENCE: 017227/0149
                      121 KKQRFHNIRGRWTGRCMSCCRSSRTRRETQL 151
128
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                                                                        68 AVCDKCLKFYSKISEYRHYCYSLYGTTLEQQYNKPLCDLLIRCINCQKPLCPEEKQRHLD 127
                                                                                                  61 AVXDKCLKFYSKISEYRHYCYSVYGTTLEQQYNKPLCDLLIRCINXQKPLCPEEKQRHLD 120
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                                                                                                                                                     8 MFQDPQERPRKLPQLCTELQTTIHDIILECVYCKQQLLRREVYDFAFRDLCIVYRDGNPY
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KKQRFHNIRGRWTGRCMSCCRSSRTRRETQL 158
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98.0%;
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Pred. No. 2.4e-80;
1; Mismatches 2;
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Pred. No. 2.3e-80;
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Result
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Maximum Match 100%
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  Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed and is derived by analysis of the total score distribution.
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1: /EMC_Celerra_SIDS3/ptodata/2/pubpaa/US09_NEW_PUB.pep:*

2: /EMC_Celerra_SIDS3/ptodata/2/pubpaa/US07_NEW_PUB.pep:*

3: /EMC_Celerra_SIDS3/ptodata/2/pubpaa/US07_NEW_PUB.pep:*

4: /EMC_Celerra_SIDS3/ptodata/2/pubpaa/DS08_NEW_PUB.pep:*

5: /EMC_Celerra_SIDS3/ptodata/2/pubpaa/JS10_NEW_PUB.pep:*

6: /EMC_Celerra_SIDS3/ptodata/2/pubpaa/US10_NEW_PUB.pep:*

7: /EMC_Celerra_SIDS3/ptodata/2/pubpaa/US10_NEW_PUB.pep:*

8: /EMC_Celerra_SIDS3/ptodata/2/pubpaa/US10_NEW_PUB.pep:*
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GenCore version 5.1.9 (c) 1993 - 2006 Biocceleration Ltd
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US-10-933-49-33871
US-10-953-349-33870
US-10-953-349-33870
US-11-293-697-2762
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US-11-293-697-2762
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       2762, Appli
17182, Ap
6305, Ap
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6304, Ap
32521, A
32521, A
32519, A
4, Appli
4, Appli
474, App
2225, App
2225, App
18099, A
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RESULT 1 US-11-209-206-4

ALIGNMENTS

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58.5	58.5	58.5	59		59	59	59	59	59	59	59	60	60.5	60.5	60.5	60.5	60.5	61	19
7.0	7.0	7.0	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.2	7.3	7.3	7.3	7.3	7.3	7.3	7.3
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Sequence 38139,	Sequence 38140,	Sequence 37463,	Sequence 25006,	Seguence 25007,	Sequence 25008,	Sequence 13387,	Sequence 13388, A	-		1032,	Sequence 13389,	Sequence 3034,	Sequence 175, App	`~	Sequence 3919, Ap	Sequence 365, App	Sequence 28497,	Sequence 19917,	Sequence 19918,

RESULT 2 US-11-223-610-1 ; OTHER INFORMATION: Derived from the E6 early coding region of HPV 16 US-11-209-206-4 Sequence 1, Application US/11223610 Publication No. US20060111289A1 GENERAL INFORMATION: Sequence 4, Application US/11209206 Publication No. US20060110794A1 GENERAL INFORMATION: SOFTWARE: PatentIn version 3.1 SEQ ID NO 4 LENGTH: 22 Matches Query Match Best Local Similarity CURRENT APPLICATION NUMBER: US/11/209,206 CURRENT FILING DATE: 2005-08-22 PRIOR APPLICATION NUMBER: US 60/394,172 PRIOR FILING DATE: 2002-07-02 PRIOR APPLICATION NUMBER: US 09/828,645 PRIOR FILING DATE: 2001-04-05 NUMBER OF SEQ ID NOS: 8 APPLICANT: Impact Diagnostics APPLICANT: Impact Diagnostics TITLE OF INVENTION: Peptides from the E2, E6 and E7 Proteins of Human Papillomaviruse TITLE OF INVENTION: 18 for Detecting and/or Diagnosing Cervical and Other Human Papi TITLE OF INVENTION: Associated Cancers FILE REFERENCE: 3352-2-2 TYPE: PRT FEATURE: ORGANISM: Artificial Sequence 55 RDGNPYAVXDKCLKFYSKISEY 76 21; RDGNPYAVCDKCLKFYSKISEY Conservative 13.7**%**; 95.5**%**; 0, Score 114; DB 7; Pred. No. 3.7e-06; Mismatches Length 22 Indels °, Gaps 0

밁 Ś

APPLICANT: Mizejewski, Gerald J.
TITLE OF INVENTION: Compositions and Methods
TITLE OF INVENTION: Inhibitory Peptides
FILE REFERENCE: HOLLAND-09516
CURRENT APPLICATION NUMBER: US/11/223,610
CURRENT FILING DATE: 2005-09-09

of Using Alpha-Fetoprotein Growth

NUMBER OF

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; SOFTWARE: PatentIn version 3
; SEQ ID NO 1
; LENGTH: 590
; TYPE: PRT
; ORGANISM: Homo sapiens
US-11-223-610-1
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RESULT 4
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PRIOR FILING DATE: 2003-09-05
NUMBER OF SEQ ID NOS: 35
SOFTWARE: PATENTIN VERSION 3.2
SEQ ID NO 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 4, Application US/10933854 Publication No. US20060105347A1
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Best Local
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Best Local Similarity
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CURRENT APPLICATION NUMBER: US/10/933,854
CURRENT FILING DATE: 2004-09-03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ENERAL INFORMATION:
APPLICANT: GTC Biotherapeutics, Inc.
APPLICANT: Meade, Harry
APPLICANT: Meade, Harry
TITLE OF INVENTION: Method for the Production
TITLE OF INVENTION: Milk
                                                                                                                                                                                                                                                                                                                                                                                    FEATURE:

NAME/KEY: misc_feature
OTHER INFORMATION: Human Alpha Fetoprotein
PUBLICATION INFORMATION:
DATABASE ACCESSION NUMBER: Genbank/Accession No. V01514
DATABASE ENTRY DATE: 1995-03-30
RELEVANT RESIDUES: (19)..(609)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LENGTH: 591
TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                               Local Similarity
                                                                        367 FQTENPLECQDKGEEELQKYIQESQ 391
                                                                                                                                             310 PNLNRFLGDRDFNQFSSGEKNIFLASFVHEYSRRHPQLAV---SVILRVAKGYQELLEKC
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23.4%; Pred. No. 1.7;
ative 26; Mismatches
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Pred. No. 1.7;
26; Mismatches
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GENERAL INFORMATION:

APPLICANT: GTC Biotherapeutics, Inc.
APPLICANT: Meade, Harry
APPLICANT: Meade, Harry
APPLICANT: Cox, Geoffrey F.
TITLE OF INVENTION: Method for the Production of
TITLE OF INVENTION: Milk
FILE REFERENCE: GTC-220 PCT
CURRENT APPLICATION NUMBER: US/10/933,854
CURRENT FILING DATE: 2004-09-03
PRIOR APPLICATION NUMBER: 60/500,910
PRIOR FILING DATE: 2003-09-05
NUMBER OF SEQ ID NOS: 35
SOFTWARE: Patentin version 3.2
SEQ ID NO 2
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publication No. US20060105347A1
GENERAL INFORMATION:
APPLICANT: GTC Biotherapeutics, Inc.
APPLICANT: Meade, Harry
APPLICANT: Cox, Geoffrey F.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 2, Application US/10933854 publication No. US20060105347A1
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Best Local Similarity
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DATABASE ACCESSION NUBER: Genbank/Accession
DATABASE ENTRY DATE: 1995-03-30
RELEVANT RESIDUES: (19).(609)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Cox, Geoffrey F.

TITLE OF INVENTION: Method for the Production of Fusion Proteins in Transgenic Mammal TITLE OF INVENTION: Milk FILE REFERENCE: GTC-220 PCT CURRENT APPLICATION NUMBER: US/10/933,854
CURRENT FILING DATE: 2004-09-03
                  PUBLICATION INFORMATION:
DATABASE ACCESSION NUMBER: Genbank/Accession No. V01514
DATABASE ENTRY DATE: 1995-03-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION NUMBER: 60/500,910 PRIOR FILING DATE: 2003-09-05
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                                                                           FEATURE:
NAME/KRY: misc feature
OTHER INFORMATION: Human Alpha Fetoprotein
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FEATURE:
NAME/KEY: misc_feature
OTHER INFORMATION: Human Alpha Fetoprotein
                                                                                                                                             ORGANISM: Homo sapiens
                                                                                                                                                                         LENGTH: 609
TYPE: PRT
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RELEVANT RESIDUES: (1)..(609)
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Pred. No. 1
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RESULT 7
US-10-953-349-33870
Sequence 33870, Application US/10953349
Publication No. US20060107345A1
GENERAL INFORMATION:
APPLICANT: ALEXANDROV, Nickolai et al.
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; LENGTH: 809
; TYPE: PRT
; ORGANISM: Zea mays subsp. mays
US-10-953-349-33870
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US-10-953-349-33871
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US-10-953-349-33871
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TITLE OF INVENTION: SEQUENCE-DETERMINED DNA FRAGMENTS AND CORRESPONDING POLYPEPTIDES
TITLE OF INVENTION: ENCONDED THERBY
FILE REFERENCE: 2750-1579PUS2
CURRENT APPLICATION NUMBER: US/10/953,349
CURRENT FILING DATE: 2004-09-30
NUMBER OF SEQ ID NOS: 40252
SOFTWARE: PatentIn version 3.3
SEQ ID NO 33871
LENGTH: 800
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Publication No. US20060107345A1
GENERAL INFORMATION:
                                                                             SOFTWARE: PatentIn version 3.3 SEQ ID NO 33870
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                                                                                                                    CURRENT APPLICATION NUMBER: US/10/953,349
CURRENT FILING DATE: 2004-09-30
NUMBER OF SEQ ID NOS: 40252
                                                                                                                                                                                 TITLE OF INVENTION: SEQUENCE-DETERMINED DNA FRAGMENTS AND CORRESPONDING POLYPEPTIDES TITLE OF INVENTION: ENCONDED THERBY FILE REFERENCE: 2750-1579PUS2
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                                                                                                                                                                                                                                                                                                                                                                                                                574 TLFFNRHIDQLILCCLYGVAKVCQLE 599
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                                                                                                                                                                                                                                                                                                                                                                                                                                                         92 ---YNKPLCDLLIRCINXQKPLCPEE 114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       55 RDGNPYAVXDKCLK-----FYSKISE-----YRHYC-----YSVYGTTLEQQ- 91
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23.3%; Pred. No. 3.8;
tive 22; Mismatches
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GENERAL INFORMATION:
APPLICANT: HELIX RESEARCH INSTITUTE
APPLICANT: HELIX RESEARCH INSTITUTE
FITTE OF INVENTION: NOVel full length cDNA
FILE REFERENCE: H1-A0106
CURRENT APPLICATION NUMBER: US/11/293,697
CURRENT FILING DATE: 2005-12-05
PRIOR APPLICATION NUMBER: US/10/108,260
PRIOR FILING DATE: 2002-03-28
NUMBER OF SEQ ID NOS: 5458
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; Sequence 2762, Application US/11293697
; Publication No. US20060105376A1
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                                      SOFTWARE: PatentIn Ver.
SEQ ID NO 2762
LENGTH: 531
TYPE: PRT
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ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
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Publication No. US20060107345A1
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Best Local Similarity 23.3%;
Matches 34; Conservative 22
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TITLE OF INVENTION: SEQUENCE-DETERMINED
TITLE OF INVENTION: ENCONDED THERBY
FILE REFERENCE: 2750-1579PUS2
CURRENT APPLICATION NUMBER: US/10/953,34
CURRENT FILING DATE: 2004-09-30
NUMBER OF SEQ ID NOS: 40252
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Pred. No. 3.
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GENERAL INFORMATION:
APPLICANT: Impact Diagnostics
APPLICANT: Impact Diagnostics
APPLICANT: Impact Diagnostics
APPLICANT: Impact Diagnostics
TITLE OF INVENTION: Peptides from the E2, E6 and
TITLE OF INVENTION: Associated Cancers
FILE REFERENCE: 3352-2-2
FILE REFERENCE: 3352-2-2
CURRENT APPLICATION NUMBER: US/11/209,206
CURRENT FILING DATE: 2005-08-22
PRIOR APPLICATION NUMBER: US 60/394,172
PRIOR APPLICATION NUMBER: US 09/828,645
PRIOR FILING DATE: 2001-04-05
NUMBER OF SEQ ID NOS: 8
SOFTWARE: Patentin version 3.1
SEQ ID NO 5
LENGTH: 22
TYDE: DET
                                                  TITLE OF INVENTION: SEQUENCE-DETERMINED DNA
TITLE OF INVENTION: ENCOMDED THERBY
FILE REFERENCE: 2750-1579PUS2
CURRENT APPLICATION NUMBER: US/10/953,349
CURRENT FILING DATE: 2004-09-30
NUMBER OF SEQ ID NOS: 40252
SOFTWARE: Patentin version 3.3
SEQ ID NO 17182
LENGTH: 369
; ORGANISM: Glycine max US-10-953-349-17182
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US-10-953-349-17182
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US-11-209-206-5
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Best Local Similarity
Matches 13; Conserv
                                                                                                                                                                                                                                              Sequence 17182, Application US/10953349
Publication No. US20060107345A1
GENERAL INFORMATION:
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Publication No. US20060110794A1
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Best Local Similarity
                                                                                                                                                                                                                                APPLICANT: ALEXANDROV, Nickolai et al.
                                        TYPE: PRT
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ORGANISM: Artificial
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        271
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      86
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22.0%; Pred. No. 3.5;
tive 16; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 68; DB 7
Pred. No. 0.23;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             E6 early coding region of HPV
                                                                                                                                                                                                              DNA
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APPLICANT: ALEXANDROV, Nickolai et al.
TITLE OF INVENTION: SEQUENCE-DETERMINED DNA FR.
TITLE OF INVENTION: ENCONDED THERBY
FILE REFERENCE: 2750-1579PUS2
CURRENT APPLICATION NUMBER: US/10/953,349
CURRENT FILING DATE: 2004-09-30
NUMBER OF SEQ ID NOS: 40252
SOFTWARE: PAEENTIN VERSION 3.3
SEQ ID NO 6305
LENGTH: 515
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US-10-953-349-6306
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                                        US-10-953-349-6305
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: ALEXANDROV, Nickolai et al.
TITLE OF INVENTION: SEQUENCE-DETERMINED DNA FRAGMENTS AND CORRESPONDING POLYPEPTIDES
TITLE OF INVENTION: ENCONDED THERBY
FILE REFERENCE: 2750-1579US2
CURRENT APPLICATION NUMBER: US/10/953,349
CURRENT FILING DATE: 2004-09-30
NUMBER OF SEQ ID NOS: 40252
SOFTWARE: Patentin version 3.3
SEQ ID NO 6336
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 6306, Application US/10953349 Publication No. US20060107345A1 GENERAL INFORMATION:
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Best Local
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Query Match
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                                                         ORGANISM: Arabidopsis thaliana
                                                                                   TYPE: PRT
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Local Similarity 22.2%;
hes 39; Conservative 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                         301 LVPYTRONLTWTQHAFNESIGEIQGIATAAFERLKGRW-----ACLOKRTBVKLQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                110 LCPEEKQ----RHLDKKQ-----RFHNIRGRWTGRCMSCCRSSRTRRETQ 150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        194 ESVHKIPNVVGSIYTTHIPIIAPKVHVAAYFNKRHTERNOKTSYSITVQGVVNADGIFTD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      170 WFKEVEKIIQPLFKEIKDSQGRTPQMLFTEEHKELAKEGE-----KWLKNTASSC 219
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        117 FNLIYDIGAHKDLITSYRDNNNHNI----LHLAGKLAPSEQLHV---VSGAALQMQRELL 169
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             50 LCIVYRDGNPYAVXDKCLKFYSKISEYRHYCYSVYGTTLEQQYNKPLCDLLIRCINXQKP 109
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 MFQDPQERPRKLPQLCTELQTTIHDIILECVYCKQQLL-------RRE-- 41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         VCI----GNPGSLTDDQILEKSSLSRQRAARGMLRDSWIVGNSGFPLTDYL
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7.78;
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Pred. No. 9.
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Pred. No. 16;
  Score 63.5;
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9.9;
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  В
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  Length 515;
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RESULT 15 US-10-953-349-32521 (Sequence 32521, Application US/10953349 PUblication No. US20060107345A1 (GENERAL INFORMATION: APPLICANT: ALEXANDROV, Nickolai et al. TITLE OF INVENTION: SEQUENCE-DETERMINED DNA FRAGMENTS AND CORRESPONDING POLYPEP TITLE OF INVENTION: ENCONDED THERBY FILE REFERENCE: 2750-1579PUS2 CURRENT APPLICATION NUMBER: US/10/953,349 CURRENT FILING DATE: 2004-09-30 NUMBER OF SEQ ID NOS: 40252 SOFTWARE: Patentin version 3.3 SEQ ID NO 32521 LENGTH: 247 TYPE: PRT ORGANISM: Triticum aestivum US-10-953-349-32521 Query Match 7.6%; Score 63; DB 6; Length 247; Best Local Similarity 25.7%; Pred. No. 10;	Query Match Best Local Similarity 21.0%; Pred. No. 21; Best Local Similarity 21.0%; Pred. No. 21; Matches 37; Conservative 19; Mismatches 69; Indels 51; Gaps 6; Qy 7 ERPRKLPQLCTELQTTIHDIILECVYCKQQLLKREV	RESULT 14 US-10-953-349-6304 ; Sequence 6304, Application US/10953349 ; Publication No. US20060107345A1 ; GENERAL INFORMATION: ; APPLICANT: ALEXANDROV, Nickolai et al. TITLE OF INVENTION: SEQUENCE-DETERMINED DNA FRAGMENTS AND CORRESPONDING POLYPEP' TITLE OF INVENTION: ENCONDED THERBY FILE REFERENCE: 2750-1579PUS ; FILE REFERENCE: 2750-1579PUS ; CURRENT APPLICATION NUMBER: US/10/953,349 ; CURRENT FILING DATE: 2004-09-30 ; NUMBER OF SEQ ID NOS: 40252 ; SOFTWARE: PatentIn version 3.3 ; SEQ ID NO 6304 ; LENGTH: 540 ; TYPE: PRT ; ORCANISM: Arabidopsis thaliana US-10-953-349-6304	Best Local Similarity 21.0%; Pred. No. 20; Matches 37; Conservative 19; Mismatches 69; Indels 51; Gaps 6; Oy 7 ERPRKLPQLCTELQTTIHDIILECVYCKQQLLRREV
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Search completed: June 6, 2006, 12:33:23 Job time: 11.9157 secs

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Result
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Maximum Match 100%
Listing first 45 summaries
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Maximum DB seq length: 2000000000
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      Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
    Score
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1: pir1:*
2: pir2:*
3: pir3:*
4: pir4:*
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Match
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830
1 MFQDPQERPRKLPQLCTELQ......WTGRCMSCCRSSRTRRETQL 151
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    GenCore version 5.1.9
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    W6WL131
W6WL33
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protein E6
protein = 6
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                       human
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Qy 1 MFQDPOERPRKLPQLCTELQTTIHDIILECVYCKQQLLRREVYDFAFRDLCIVYRDGNPY 60	A;Gene: E6 A;Gene: E7 A;Gene: E8 A;Gene: E8 C;Superfamily: papillomavirus E6 protein; zinc finger C;Superfamily: papillomavirus E6 protein; zinc finger C;Keywords: DNA binding; early protein; zinc finger C;Keywords: DNA binding; early protein; zinc finger C;Keywords: DNA binding; early protein; zinc finger C;Superfamily: papillomavirus F;310-146/Region: zinc finger CCCC motif C;Keywords: DNA binding; early protein; zinc finger C;Superfamily: papillomavirus E;310-146/Region: zinc finger CCCC motif F;317-73/Region: zinc finger CCCC motif F;317-73/Region: zinc finger CCCC motif E;3110-146/Region: zinc finger CCCC motif E;3110-146/Region: zinc finger CCCC motif E;3110-146/Region: zinc finger CCC motif E;3110-146/Region: zinc finger CCC motif E;3110-146/Region: zinc finger CCCC motif Cuttorial protein; zinc finger C;Superfamily: papillomavirus E6 protein; zinc finger C;Superfamily: papillomavirus E6 protein; zinc finger CCC motif Cuttorial protein; zinc finger CCCC motif CCCC mo	RESULT 1 WOWNLES protein E6 - human papillomavirus type 16 C;Species: human papillomavirus type 16 C;Date: 28-May-1986 #sequence_revision 28-May-1986 #text_change 09-Jul-2004 C;Date: 28-May-1985; r10427 C;Date: 18-May-1986; T10427 R;Seedorf, K.; Krammer, G; Durst, M.; Suhai, S.; Rowekamp, W.G. Virology 145, 181-185, 1985 A;Title: Human papillomavirus type 16 DNA sequence. A;Reference number: A22355; MUID:85246220; PMID:2990099 A;Accession: A03682 A;Molecule type: DNA A;Residues: 1-158 <see> A;Cross-references: UNIPROT:P03126; UNIPARC:UPI00000138B; GB:K02718; NID:g333031; B;Cross-references: UNIPROT:D3126; UNIPARC:UPI00000138B; GB:K02718; NID:g333031; A;Kennedy, I.M.; Haddow, J.K.; Clements, J.B. J. Virol. 65, 2093-2097, 1991 A;Title: A negative element in the human poapillomavirus type 16 genome acts at the A;Reference number: Z17014; MUID:91162763; PMID:1848319 A;Rocession: T10427 A;Status: preliminary; translated from GB/EMBL/DDBJ A;Rocession: preliminary; translated from GB/EMBL/DDBJ A;Roses-references: UNIPARC:UPI000000138B; EMBL:K02718; NID:g333031; PIDN:AAA46939. C;Genetics:</see>	30 283 34.1 142 2 S36509 E6 protein - human 31 273 32.9 150 1 W6WL42 E6 protein - human 32 268 32.3 150 1 W6WL42 E6 protein - human 24 268 32.3 150 1 W6WL42 E6 protein - human 25 26532 E6 protein - human 34 231 27.8 152 2 S36550 E6 protein - human 35 154 18.6 138 2 S36567 E6 protein - human 36 136.5 16.4 140 1 W6WL41 E6 protein - human 39 134.5 16.2 139 1 W6WLB2 E6 protein - human 26 protein - human 27 15.5 15.6 207 2 S36491 E6 protein - human 27 15.3 57 2 S36473 E6 protein - multi 27 15.3 57 2 S36538 E6 protein - human 28 protein - human 28 protein - human 29 protein - human 20 protein - human

PIDN:

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MGMLJS 2
MGMLJS protein - human papillomavirus type 35
E6 protein - human papillomavirus type 35
C;Species: human papillomavirus type 35
A;Note: host Homo sapiens (man)

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A;Cross-references: UNIPROT:P17386; UNIPARC:UPI00001383CB; GB:J04353; NID:g333048; C;Comment: This protein may be involved in the oncogenic potential of this virus. C;Superfamily: papillomavirus E6 protein C;Keywords: DNA binding; early protein; zinc finger C;Keywords: DNA binding; early protein; zinc finger F;30-66/Region: zinc finger CCCC motif F;103-139/Region: zinc finger CCCC motif
                                                                                                                                                                                                                                                                                                                                                                                                            A;Note: host Homo sapiens (man)
C;Date: 31-Mar-1990 #sequence_revision 31-Mar-1990 #text_change 09-Jul-2004
C;Accession: A3244
C;Accession: A3244
R;Goldsborough, M.D.; DiSilvestre, D.; Temple, G.F.; Lorincz, A.T.
Virology 171, 306-311, 1989
Virology 171, 306-311, 1989
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R;Delius, H.; Hofmann, B.
submitted to the EMBL Data Library, August
A;Description: Primer-directed sequencing
                                                                                                                                                                                                                                                                                               A; Molecule type: DNA
A; Residues: 1-149 <GOL>
                                                                                                                                                                                                                                                                                                                                                             A;Reference number: A94398; MUID: A;Accession: A32444
                                                                                                                                                                                                                                                                                                                                                                                 A;Title: Nucleotide sequence of human papillomavirus type 31: a cervical neoplasia-assoc
A;Reference number: A94398; MUID:89299478; PMID:2545036
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A;Residues: 1-149 <DEL>
A;Cross-references: UNIPARC:UPI00001383CF;
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A; Residues: 1-149 <MAR>
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                                                                                                      Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MFQDPQERPRKLPQLCTELQTTIHDIILECVYCKQQLLRREVYDFAFRDLCIVYRDGNPY 60
MFKNPAERPRKLHELSSALEIPYDELRLNCVYCKGQLTETEVLDFAFTDLTIVYRDDTPH
                                          MFQDPQERPRKLPQLCTELQTTIHDIILECVYCKQQLLRREVYDFAFRDLCIVYRDGNPY 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          KKORFHNIRGRWTGRCMSCCRSSRTRRETQL 151
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                                                                                                      63.0%;
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                                                                                  Score 523; DB 1;
Pred. No. 9.9e-43;
18; Mismatches 33
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Pred. No. 5.7e-48;
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of human papillomavirus
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A;Cross-references: UNIPROT:P26555; UNIPARC:UPI000000081B; C;Superfamily: papillomavirus E6 protein C;Keywords: DNA binding; early protein; zinc finger F;30-66/Region: zinc finger CCCC motif F;103-139/Region: zinc finger CCCC motif
                                                                                                                                                                                                                                                                              Virology 185, 424-427, 1991
A;Title: Human papillomavirus type 58 DNA sequence.
A;Reference number: A36779; MUID:92024102; PMID:1656594
A;Accession: E36779
                                                                                                                                                                                                                                                                                                                                                     A;Note: host Homo sapiens (man)
G;Date: 31-Mar-1992 #sequence_revision 31-Mar-1992
C;Accession: E36779
R;Kirii, Y.; Iwamoto, S.; Matsukura, T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A;Cross-references: UNIPROT:P06427; UNIPARC:UPI00001383CD; C;Superfamily: papillomavirus E6 protein; C;Keywords: DNA binding; early protein; zinc finger F;30-66/Region: zinc finger CCCC motif F;103-139/Region: zinc finger CCCC motif
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W6WL33
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8,0
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A; Residues: 1-149 < KIR>
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A; Residues: 1-149 < COL>
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                  MFQDFQERPRKLFQLCTELQTTIHDIILECVYCKQQLLRREVYDFAFRDLCIVYRDGNFY
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MFQDAEEKPRTLHDLCQALETSVHEIELKCVECKKTLQRSEVYDFVFADLRIVYRDGNPF
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Pred. No. 1.9e
19; Mismatches
                                                                  Score 496; DB 1;
Pred. No. 3.7e-40;
0; Mismatches 36
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.9e-42;
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RESULT 6
A61237
E6 protein -
C; Species: hu
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C;Superfamily: papillomavirus E6 protein
C;Keywords: DNA binding; early protein; nucleus; zinc finger
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                R;Takami, Y.; Kondoh, G.; Saito, J.; Noda, K.; Sudiro, T.M.; Sjahrurac Int. J. Cancer 48, 516-522, 1991
A;Title: Cloning and characterization of human papillomavirus type 52 A;Reference number: A61237; MUID:91258022; PMID:1646174
A;Accession: A61237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          E6 protein - human papillomavirus type 52
C;Species: human papillomavirus type 52
C;Date: 12-May-1994 #sequence_revision 12-May-1994 #text_change 03-May-1996
C;Accession: A61237
                                                                                                                                                                                                                                                                                                                                                            R;Delius, H.; Hofmann, B.
submitted to the EMBL Data Library, August 1993
A;Description: Primer-directed sequencing of hu
                                                                                                                                                                                                                                                                                                                                                                                                                     E6 protein - human papillomavirus type 52 C;Species: human papillomavirus type 52 C;Date: 20-Feb-1995 #sequence_revision 20-Feb-1995 #text_change 09-Jul-2004 C;Accession: $36573
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A; Residues: 1-148 < DEL>
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A; Accession: S36573
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C;Superfamily: papillomavirus E6 protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-148 <TAK>
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                                 61 AVXDKCLKFYSKISEYRHYCYSVYGTTLEQQYNKPLCDLLIRCINXQKPLCPEEKQRHLD 120
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                                                                                                                                                                         Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           h 58.7%; Score 487; DB 2; Similarity 61.7%; Pred. No. 2.6e-39;
GVCIMCLRFLSKISEYRHYQYSLYGKTLEERVKKPLSEITIRCIICQTPLCPEEKERHVN
                                                                                                       MFQDPQERPRKLPQLCTELQTTIHDIILECVYCKQQLLRREVYDFAFRDLCIVYRDGNPY
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                                                                         MFEDPATRPRTLHELCEVLEESVHEIRLQCVQCKKELQRREVYKFLFTDLRIVYRDNNPY
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                                                                                                                                                                   58.7%;
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                                                                                                                                                 Score 487; DB 2;
Pred. No. 2.6e-39;
19; Mismatches 35
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A;Cross-references: UNIPROT:P26554; UNIPARC:UPI00001383DC; C;Superfamily: papillomavirus E6 protein C;Keywords: DNA binding; early protein; zinc finger F;30-66/Region: zinc finger CCCC motif F;103-139/Region: zinc finger CCCC motif
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          C;Accession: E40415

R;Lungu, O.; Crum, C.P.; Silverstein, S.J.

J. Virol. 65, 4216-4225, 1991

A;Title: Biologic properties and nucleotide sequence analysis
A;Reference number: A40415; MUID:91303675; PMID:1649326

A;Accession: E40415
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R;Delius, H.; Hofmann, B.
submitted to the EMBL Data Library, August 1993
A;Description: Primer_directed sequencing of human
  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A;Note: host Homo sapiens (man)
C;Date: 31-Mar-1992 #sequence_revision 31-Mar-1992 #text_change 09-Jul-2004
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                                                                                                                                                                                                                                                                                                                                                                                                                                           A; Molecule type: DNA
A; Residues: 1-151 <LUN>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A; Status: translation not shown
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C;Species: human papillomavirus type 51
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A; Residues: 1-148 < DEL>
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A; Accession: S36515
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Similarity 60.4%;
KKQRFHNIRGRWTGRCMSCCRSSRTRRETQL 151
                                                AVCKQCLLFYSKIREYRRYSRSVYGTTLEAITKKSLYDLSIRCHRCQRPLGPEEKQKLVD 120
                                                                                    AVXDKCLKFYSKISEYRHYCYSVYGTTLEQQYNKPLCDLLIRCINXQKPLCPEEKQRHLD 120
                                                                                                                                      MFEDKRERPRILHELCEALNVSMHNIQVVCVYCKKELCRADVYNVAFTEIKIVYRDNNPY
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                                                                                                                                                                                                                               55.4%; Score 460; DB 1
57.0%; Pred. No. 1e-36;
cive 24; Mismatches
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Pred. No. 5.1e-39;
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A; Molecule type: DNA
A; Residues: 1-158 <COL>
A; Cross-references: UNIPARC: UPI000002COFB; GB: X05015; NID: 960975; P:
A; Cross-references: UNIPARC: UPI000002COFB; GB: X05015; NID: 960975; P:
A; Matlashewski, G: Banks, L: Wu-Liao, J: Spence, P: Pim, D: Crr
Creation of Virol. 67, 1909-1916, 1986
A; Title: The expression of human papillomavirus type 18 E6 protein:
A; Reference number: A92791; MUJD: 86306665; PMID: 3018129
A; Contents: annotation; identification of the protein
C; Superfamily: papillomavirus E6 protein; transforming protein; zinc C; Keywords: DNA binding; early protein; transforming protein; zinc F; 32-68/Region: zinc finger CCCC motif
F; 32-68/Region: zinc finger CCCC motif
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S36561
E6 protein -
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C;Species: human papillomavirus type 18
C;Date: 30-Sep-1987 #sequence_revision 30-Sep-1987 #text_change 09-Jul-2004
C;Accession: A26165; G26251
R;Seedorf, K.; Oltersdorf, T.; Kraemmer, G.; Roewekamp, W.
EMBO J. 6, 139-144, 1987
A;Title: Identification of early proteins of the human papilloma viruses type 1, Title: Identification of early proteins of the human papilloma viruses type 1, Reference number: A91068; MUID:87218459; PMID:3034571
A;Accession: A26165
                                                                                                                                                                                                                                                                                                                                                                                                     R;Cole, S.T.; Danos, O.
J. Mol. Biol. 193, 599-608, 1987
A;Title: Nucleotide sequence and comparative analysis of the human papillomavirus type A;Reference number: A92937; MUID:87283882; PMID:3039146
A;Accession: G26251
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C;Date: 20-Feb-1995 #sequence_revision 20-Feb-1995 #text_change 09
C;Datession: S36561
R;Delius, H.; Hoffmann, B.
submitted to the EMBL Data Library, August 1993
A;Description: Primer_directed sequencing of human papillomavirus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A; Molecule type: DNA
A; Residues: 1-158 < SEE>
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A; Residues: 1-158 < DEL>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ;Cross-references: UNIPROT:P21735; UNIPARC:UPI00001383D8; EMBL:X74479; NID:g397022; PII;Superfamily: papillomavirus E6 protein
;Superfamily: papillomavirus E6 protein; nucleus; zinc finger
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 6 protein - human papillomavirus type 45;Species: human papillomavirus type 45;Species: human papillomavirus type 45;Date: 20-Feb_1995 #sequence_revision 20-Feb-1995 #text_change 09-Jul-2004
     Matches
                          Query Match
Best Local :
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Best Local
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  87; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACHKCIDFYSRIRELRYYSNSVYGETLEKITNTELYNLLIRCLRCQKPLNPAEKRRHLKD 123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             VXDKCLKFYSKISEYRHYCYSVYGTTLEQQYNKPLCDLLIRCINXQKPLCPEBKQRHLDK 121
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54.9%;
ilarity 56.1%;
Conservative 2
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56.1%;
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  21;
Score 455.5; DB 1;
Pred. No. 2.8e-36;
21; Mismatches 42;
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Pred. No. 1.2e-36;
Pred. No. 41;
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                                            Length
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                                               158;
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A;Cross-references: UNIPROT:P24835; UNIPARC:UPI00001383D2; C;Superfamily: papillomavirus E6 protesin C;Keywords: DNA binding; early protein; transforming proteir; E;32-68/Region: zinc finger CCCC motif F;105-141/Region: zinc finger CCCC motif
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A;Molecule type: DNA
A;Residues: 1-158 <REU>
A;Residues: 10158 <REU>
A;Cross-references: UNIPROT:P27962; UNIPARC:UPI000000082F;
C;Superfamily: papillomavirus E6 protein
C;Keywords: DNA binding; early protein; zinc finger
E;32-68/Region: zinc finger CCCC motif
E;105-141/Region: zinc finger CCCC motif
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 E6 protein - human papillomavirus type ME180 (provirus)
C;Species: human papillomavirus type ME180
A;Note: host Homo sapiens (man)
C;Date: 30-Jun-1992 #sequence_revision 30-Jun-1992 #text_change 09-Jul-2004
C;Accession: C40509
R;Reuter, S.; Dellus, H.; Kahn, T.; Hofmann, B.; zur Hausen, H.; Schwarz, E.
J. Virol. 65, 5564-5568, 1991
A;Title: Characterization of a novel human papillomavirus DNA in the cervical carcinoma
A;Reference number: A40509; MUID:91374616; PMID:1716694
A;Accession: C40509
                                                                                                                       A; Molecule type: DNA
A; Residues: 1-158 < VOL>
                                                                                                                                                                                                               A; Title: Genome organization and nucleotide sequence of A; Reference number: A38502; MUID:91135017; PMID:1847266
                                                                                                                                                                                                                                        Virology 181, 419-423, 1991
A; Title: Genome organization
                                                                                                                                                                                                                                                                                                                           A;Note: host Homo sapiens (man)
C;Date: 31-Dec-1991 #sequence_revision 31-Dec-1991 #text_change 09-Jul-2004
                                                                                                                                                                                                                                                                                                                                                                              E6 protein - human papillomavirus type 39 C; Species: human papillomavirus type 39
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                                                                                                                                                                 A; Status: translation not shown
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Volpers, C.; Streeck, R.E.
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SKRRFHKIAGNFTGQCRHCWTSKREDRRRTRQETQV
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Pred. No. 6.8e-36;
1; Mismatches 44
                                                   transforming protein;
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                                                     zinc
                                                                                                                                                                                                                                        papillomavirus type
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RESULT 14
W6WLR1
E6 protein -
                                           A;Molecule type: DNA
A;Residues: 1-150 <DEL>
A;Residues: 1-150 <DEL>
A;Cross-references: UNIPROT:P36807; UNIPARC:UPI00001383C5; EMBL:X74472; NID:g396956;
C;Superfamily: papillomavirus E6 protein
C;Keywords: early protein; zinc finger
                                                                                                                                                                                                R;Delius, H.; Hofmann, B.
submitted to the EMBL Data Library, August 1993
A;Description: Primer_directed sequencing of human papillomavirus types.
                                                                                                                                                                                                                                                                         E6 protein - human papillomavirus type 26 C;Species: human papillomavirus type 26 C;Date: 20-Feb-1995 #sequence_revision 20-Feb-1995 #text_change 09-Jul-2004 C;Accession: S36544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Virology 181, 424-429, 1991
A;Title: Characterization of the complete RhPV 1 genomic sequence and an integration loc A;Reference number: A38503; MUID:91135018; PMID:1847267
A;Accession: A38503
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A; Residues: 1-191 <OST>
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                                                                                                                                                                                        A; Reference number: S36469
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        C;Species: rhesus papillomavirus
C;Date: 31-Dec-1991 #sequence_revision 31-Dec-1991 #text_change 09-Jul-2004
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Superfamily: papillomavirus E6 protein; keywords: DNA binding; early protein; transforming protein; zinc finger; 60-96/Region: zinc finger CCCC motif
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Query Match
Best Local Similarity
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MEDLINE=20112892; PubMed=10644829;
van Duin M., Snijders B.J., Vossen M.T., Klaassen E., Voorhorst F.,
van Duin M., Snijders B.J., Vossen M.T., Klaassen E., Voorhorst F.,
verheijen R.H., Helmerhorst T.J., Meijer C.J., Walboomers J.M.;
"Analysis of human papillomavirus type 16 E6 variants in relation to
p53 codon 72 polymorphism genotypes in cervical carcinogenesis.";
J. Gen. Virol. 81:317-325(2000). MEDLINE=22242222; PubMed=12355268; DOI=10.1007/80023y-002-2344-y; DeFilippis V.R., Ayala F.J., Villarreal L.P.; "Evidence of diversifying selection in human papillomavirus type 16 NUCLEOTIDE SEQUENCE. Cruz M.R., Martins C.R.F.; Submitted (MAY-2002) to the EMBL/GenBank/DDBJ databases. Cruz Mr., Cerqueira D.M., Camara G.N.L., Silva E.O., Carvalho Martins C.R.F.; but not E7 oncogenes.";
J. Mol. Evol. 55:491-499(2002). Copyrighted by the UniProt Consortium, see http://www.uniprot.org/terms Distributed under the Creative Commons Attribution-NoDerivs License Submitted (JUN-2002) to the EMBL/GenBank/DDBJ databases NUCLEOTIDE SEQUENCE. NUCLEOTIDE SEQUENCE. GO:0042025; in Xinjiang."; Hua Xue Yu Sher Sheng Æ nucleus; ĕ Genomic_DNA.
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EMBL; U34127; AAA91674.1; -; Genomic_DNA.
EMBL; U34133; AAA91680.1; -; Genomic_DNA.
GO; GO:0042025; C:host cell nucleus; IEA.
GO; GO:0003677; F:DNA binding; IEA.
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Q89852;
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MEDLINE=96079021; PubMed=7494284;
Yamada T., Wheeler C.M., Halpern A.L.,
Jenison S.A.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Viruses; dsDNA viruses, no RNA unclassified Papillomaviridae.
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InterPro; IPR001334; E6.
Pfam; PF00518; E6; 1.
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       KKQRFHNIRGRWTGRCMSCCRSSRTRRETQL 151
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 IPR001334; E6.
00518; E6; 1.
151 AA; 18320
                                                                   AVCDKCLKFYSKISEYRHYCYSVYGTTLEQQYNKPLCDLLIRCINCQKPLCPEEKQRHLD
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           518; E6;
151 AA;
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Pred. No. 2.4e-73;
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113 HPV16
09WH13 HPV16
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MEDLINE=22182962; PubMed=12195358; DOI=10.1086/342048;
MEDLINE=22182962; PubMed=12195358; DOI=10.1086/342048;
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MEDLINE=99434235; PubMed=10502513; DOI=10.1006/viro.1999.9868;

Flores E.R., Allen-Hoffmann B.L., Lee D., Sattler C.A., Lambert P.F.;

"Establishment of the human papillomavirus type 16 (HPV-16) life cycle
in an immortalized human foreskin keratinocyte cell line.";
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Alphapapillomavirus.
NCBI_TaxID=333760;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EMBL; AF125673; AAD33252.1; -; Genomic_DN
EMBL; AF486322; AAL96627.1; -; Genomic_DN
EMBL; AY686580; AAV91652.1; -; Genomic_DN
GO; GO:0042025; C:host_cell_nucleus; IEA.
GO; GO:0003677; F:DNA_binding; IEA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Chen Z., Terai M., Fu L., Herrero R., DeSalle R., Burk R.D.; "Diversifying selection in human papillomavirus type 16 lineages on complete genome analyses."; J. Virol. 79:7014-7023(2005).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Chan P.K.S., Lam C.W., Cheung T.H., Li W.W.H., Lo K.W.K., Cheung J.L.K., Xu L.Y., Cheng A.F.;
"Human papillomavirus type 16 intratypic variant infection for cervical neoplasia in southern China.";
                                                                                                                                                                                                                                                                                                                                                                                                                             InterPro; IPR001334; E6. Pfam; PF00518; E6; 1. SEQUENCE 158 AA; 1917
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Copyrighted by the UniProt Consortium, see http://www.uniprot.org/termsDistributed under the Creative Commons Attribution-NoDerivs License
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STRAIN=Qv16936E;
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01-NOV-1999,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PubMed=15890941; DOI=10.1128/JVI.79.11.7014-7023.2005;
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AA; 19173 MW;
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ID Q9WMP5_HPV16

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Best Local S
Matches 148
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05-JUL-2004, 6
07-FEB-2006, 6
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01-NOV-1999, i
01-NOV-1999, g
07-FEB-2006, 6
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116 HPV16
077816 HPV16
077816;
                                                                                            NUCLEOTIDE SEQUENCE.
MEDLINE-20112892; PubMed=10644829;
MEDLINE-20112892; PubMed=10644829;
van Duin M., Snijders P.J., Vossen M.T., Klaassen E., Voorhorst F.
Verheijen R.H., Helmerhorst T.J., Meijer C.J., Walboomers J.M.;
"Analysis of human papillomavirus type 16 E6 variants in relation
p53 codon 72 polymorphism genotypes in cervical carcinogenesis.";
J. Gen. Virol. 81:317-325(2000).
                                                                                                                                                                                                                                                                                                                         Human papillomavirus type 16. Viruses; dsDNA viruses, no RN Alphapapillomavirus.
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MEDLINE=20112892; PubMed=10644829;

van Duin M., Snijders P.J., Vossen M.T., Klaassen E., Voorhorst F.,

van Duin M., Snijders P.J., Vossen M.T., Klaassen E., Voorhorst F.,

verheijen R.H., Helmerhorst T.J., Meijer C.J., Walboomers J.M.;

"Analysis of human papillomavirus type 16 E6 variants in relation to

p53 codon 72 polymorphism genotypes in cervical carcinogenesis.";

J. Gen. Virol. 81:317-325(2000).
                       Copyrighted Distributed
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Viruses; dsDNA viruses,
Alphapapillomavirus.
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SEQUENCE 151
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                  by the UniProt Consortium, see http://www.uniprot.org/terms under the Creative Commons Attribution-NoDerivs License
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sequence version 1.
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Pred. No. 3.8e-73;
Mismatches 2;
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RESULT 6
Q89755_9PAPI
Q89755_9PAPI
AC Q89755;
DT 01-NOV-1996, s
DT 01-NOV-1996, s
DT 07-FEB-2006, e
DE Early transfoo
OS Human papillon
OC Viruses; dsDN/
OC Unclassified i
OX NCELT_TAXID=100
RN NUCLEOTIDE SER
RX MEDLINE=960790
RA Jenison S.A.;
RT "Human papillon
RA Jenison S.A.;
RT "Human papillon
RA Jenison S.A.;
RT "Virol. 69:
RA Jenison S.A.;
RT "Virol. 69:
RA Farmer A.D.;
RT 12, and L1 coc
RL J. Virol. 69:
RM NUCLEOTIDE SER
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DR EMBL; U34121;
DR GO; GO:000367;
DR Ffam; PF00518
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EMBL; AJ388061; CAB45124.1; -; Genomic_DN
EMBL; AJ388066; CCB45124.1; -; Genomic_DN
GO; GO:0042025; C:host cell nucleus; IEA.
GO; GO:0003677; F:DNA binding; IEA.
InterPro; IPR001334; E6.
Pfam; PF00518; E6; 1.
SEQUENCE 151 AA; 18334 MW; FF8F2A2FCE
                                                                                                                                                                       EMBL; U34126; AAA91673.1; -; Genomic_DNA.
EMBL; U34111; AAA91658.1; -; Genomic_DNA.
EMBL; U34121; AAA91668.1; -; Genomic_DNA.
EMBL; U34123; AAA91670.1; -; Genomic_DNA.
EMBL; U34123; C:host_cell nucleus; IEA.
GO; GO:00042025; C:host_cell nucleus; IEA.
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Viruses; dsDNA viruse
                                                                                                                                                                                                                                                                                          Copyrighted by the UniProt Consortium, see http://www.uniprot.org/teDistributed under the Creative Commons Attribution-NoDerivs License
                                                                                                                                                                                                                                                                                                                                            Submitted (AUG-1995) to the EMBL/GenBank/DDBJ databases
                                                                                                                                                                                                                                                                                                                                                                                                              "Human papillomavirus type 16 variant lineages populations characterized by nucleotide sequent L2, and L1 coding segments.";
J. Virol. 69:7743-7753(1995).
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Pfam; PF00518; E6; 1.
SEQUENCE 151 AA; 1833
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Best Local S
Matches 148
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PO3I26; O71BT;
21_JUL_1986, integrated into U
21_JUL_1986, sequence version
07_MAR_2006, entry version 45.
  NUCLEOTIDE SEQUENCE [GENOMIC DNA] MEDLINE=85246220; PubMed=2990099; Seedorf K., Krammer G., Durst M.,
                                                                                                                            Viruses; dsDNA viruses,
Alphapapillomavirus.
                                                                                                                                                                                                                              Protein E6.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human papillomavirus type 16.
Viruses; dsDNA viruses, no RNA stage;
Alphapapillomavirus.
                                                                                               NCBI_TaxID=333760;
                                                                                                                                                                             Human
                                                                                                                                                                                                         Name=E6;
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Q8BB20;
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GO:0042025; C:host cell nucleus; IEA.
GO:0003677; F:DNA binding; IEA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 121
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Evol. 55:491-499(2002).
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  Durst M., Suhai S.,
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Pred. No. 4.7e-73;
1; Mismatches 2;
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  Rowekamp W.G.;
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EMBL; AF536179; AAQ10712.1; -; Genomic DNA.
EMBL; D00735; BAA00632.1; -; Genomic DNA.
PIR; A03682; W6WLHS.
PDB; 2FK4; NMR; A=87-158.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    similarity).

-!- SUBCELULANEOUS: HPV16, in comparison to HPV types 6 and 11, is roften associated with malignant genital cancers in humans often associated with malignant genital cancers in humans.
-!- SIMILARITY: Belongs to the papillomaviruses E6 protein family.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STRAIN-Isolate European German 131;
Terai M., Fu L., Ma Z., Burk R.D.;
"Cloning and sequencing of non-European human papillomavirus (HPV)
variant complete genomes from cervicovaginal cells by an overlappi
PCR method.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   "Interaction of oncogenic papillomavirus E6 proteins with fibulin-1.", Biochem. Biophys. Res. Commun. 296:962-969(2002).
-!- FUNCTION: Transcriptional transactivator. Binds double stranded
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Schneider-Maunoury S., Pehau-Arnaudet G., Breitburd F., Or "Expression of the human papillomavirus type 16 genome in a line derived from a vulvar intraepithelial neoplasia."; J. Gen. Virol. 71:809-817(1990).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Copyrighted by the UniProt Consortium, see http://www.uniprot.org/tv
Distributed under the Creative Commons Attribution-NoDerivs License
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      "Human papillomavirus type 16 DNA sequence.";
Virology 145:181-185(1985).
                                                                                                                                                                                                                                                                                                     CHAIN
                                                                                                                                                                                                                                                                                                                  Nuclear protein; o
Zinc; Zinc-finger.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Submitted (AUG-2002) to the EMBL/GenBank/DDBJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NUCLEOTIDE SEQUENCE [GENOMIC DNA]
                                                                                                                                                                                                                                                                                                                                   3D-structure; Activator; DNA-binding; Early protein; Metal-binding;
Nuclear protein; Oncogene; Transcription; Transcription regulation;
                                                                                                                                                                                                                                                                                                                                                                   Pfam; PF00518; E6; 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  INTERACTION WITH HUMAN FBLN1,
                                                                                                                                                                                                                                                                                                                                                                                   interPro; IPR001334; E6.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DNA. Has transforming activity. Inactivates, with E6-AP ubiquitin-
protein ligase, the human TP53/p53 tumor suppressor protein by
targeting it to degradation. Binds and targets human MUP1/MPDZ
protein to degradation. Those two functions presumably contribute
to transforming activity (By similarity). Interaction with human
FBLN1 protein also seems to be linked to cell transformation.
SUBUNIT: Forms a complex with E6-AP ubiquitin-protein ligase which
interacts with human P53. Binds to human FBLN1 and MPDZ (By
 8
                               61
                                                                                                                                           Similarity
                     AVXDKCLKFYSKISEYRHYCYSVYGTTLEQQYNKPLCDLLIRCINXQKPLCPEEKQRHLD
                                                                             MFQDFQERFRKLFQLCTELQTTIHDIILECVYCKQQLLRREVYDFAFRDLCIVYRDGNFY
AVCDKCLKFYSKISEYRHYCYSLYGTTLEQQYNKPLCDLLIRCINCQKPLCPEEKQRHLD
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Potential.

PDZ-binding (By PDZ-binding (By FR -> G (in Ref. Br.)

L -> V (in Ref. Br.)
                                                                                                                                         Score 823;
Pred. No. 4.
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4.9e-73;
hes 2;
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0547J2 HPV16
Q547J2;
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24-MAY-2005,
07-FEB-2006,
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STRAIN=Qv17722E, and Qv15521E;
PubMed=15890941; DOI=10.1128/GVI.79.11.7014-7023.2005;
PubMed=15890941; DOI=10.1128/GVI.79.11.7014-7023.2005;
Chen Z., Terai M., Fu L., Herrero R., DeSalle R., Burk R.D.;
"Diversifying selection in human papillomavirus type 16 lineages on complete genome analyses.";
J. Virol. 79:7014-7023(2005).
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STRAIN-E-P, E-G241T, E-G187T, and E-G538T;
MEDLINE=22182962; PubMed=12195358; DOI=10.1086/342048;
Chan P.K.S., Lam C.W., Cheung T.H., Li W.W.H., Lo K.W.K., Chan M.Y.!
Cheung J.L.K., Xu L.Y., Cheng A.F.;
"Human papillomavirus type 16 intratypic variant infection and risk
for cervical neoplasia in southern China.";
j., Infect. Dis. 186:696-700(2002).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Submitted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              [3] NUCLEOTIDE SEQUENCE.
                                                                                                                                                                                                                                                                                                                                                                                   EMBL;
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                                                                                                                                                                                                                                                                                                                           MBL; AF486311; AAL96616.1; -; Genomic DNA.
MBL; AF486531; AAV91684.1; -; Genomic DNA.
MBL; AF486310; AAL96615.1; -; Genomic DNA.
MBL; AF486312; AAL96615.1; -; Genomic DNA.
MBL; AF486313; AAL96617.1; -; Genomic DNA.
MBL; AF486313; AAL96621.1; -; Genomic DNA.
MBL; AF486317; AAL96622.1; -; Genomic DNA.
MBL; AF486320; AAL96625.1; -; Genomic DNA.
MBL; AF486321; AAL96625.1; -; Genomic DNA.
MBL; AF486321; AAL96626.1; -; Genomic DNA.
MBL; AF486321; AAL96626.1; -; Genomic DNA.
MBL; AF486321; AAM91660.1; -; Genomic DNA.
MBL; AF486381; AAN91660.1; -; Genomic DNA.
MBL; AF486381; AAN91660.1; -; Genomic DNA.
MBL; AF486581; AAN91660.1; -; Genomic DNA.
MBL; AF486321; AAL96628.1; -; Genomic DNA.
MBL; AF486321; AAL9628.1; -; GENOMIC DNA.
MBL; AF486321; AAL9628.1; -; GENOMIC DNA.
MBL; AF486321; AAL96628.1; 
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                                       AVCDKCLKFYSKISEYRHYCYSLYGTTLEQQYNKPLCDLLIRCINCQKPLCPEEKQRHLD
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Pred. No. 4.9e-73;
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RESULT 10
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AC Q919C6;
DT 01-DEC-2001, integrate
DT 01-DEC-2001, sequence
DT 07-PEB-2006, entry ver
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                                                                                   NUCLEOTIDE SEQUENCE.
MEDLINE=22242222; PubMed=12355268; DOI=10.1007/s00239-002-2344-y;
DeFilippis V.R., Ayala F.J., Villarreal L.P.;
"Evidence of diversifying selection in human papillomavirus type
                                                                                                                                                                                                                                           Viruses; dsDNA viruses, Alphapapillomavirus.
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07-FEB-2006,
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GO; GO:0042025; C:host cell nucleus; IEA.
GO; GO:0003677; F:DNA binding; IEA.
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MEDLINE=21846229; PubMed=11857370; DOI=10.1002/ijc.10103;
Matts K.J., Thompson C.H., Cossart Y.E., Rose B.R.;
"Sequence variation and physical state of human papilloma cervical cancer isolates from Australia and New Caledonia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Viruses; dsDNA viruses, Alphapapillomavirus.
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                                                but not E7 oncogenes.";
J. Mol. Evol. 55:491-499(2002).
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NS HPV16

Q4VRN5 HPV16

Q4VRN5;

05-JUL-2005,

05-JUL-2005,

07-FEB-2006,
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PubMed=15890941; DOI=10.1128/JVI.79.11.7014-7023.2005;

Chen Z., Terai M., Fu L., Herrero R., DeSalle R., Burk R.D.;

"Diversifying selection in human papillomavirus type 16 lineages on complete genome analyses.";

J. Virol. 79:7014-7023(2005).
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GO; GO:0042025; C:host cell nucleus; IEA.
GO; GO:0003677; F:DNA binding; IEA.
InterPro; IPR001334; E6.
Pfam; PF00518; E6; 1.
SEQUENCE 151 AA; 18319 MW; 6F9DZA2FD5/
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NCBI_TaxID=333760;
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                                                                                                                                                                                                                                                                                                                                                                                                 19172 MW;
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Pred. No. 7.4e-73;
1; Mismatches 2
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RESULT

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RESULT 14
Q8QRD8 HPV16
ID Q8QRD8;
AC Q8QRD8;
DT 01-JUN-2002, integrated into UniPrc
DT 01-JUN-2002, sequence version 1.
DT 07-FEB-2006, entry version 13.
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QQQRD7;
AC QQQRD7;
AC QQQRD7;
DT 01-JUN-2
DE E6 prote
QS Human pa
QC Viruses;
QC Alphapap
QX NCBI_Tax
RN [1]
RP NUCLEOTI
RC STRAIN=E
RX MEDLINU=E
RX Chan p.K
RA Chan p.K
CC Unitribu
CC Copyrigh
CC Copyrigh
CC Distribu
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CC Distribu
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CC Distribu
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Best Local S
Matches 147
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Q8QRD7;
01-JUN-2002,
                                                        STRAIN=E-G449T;

MEDLINE=22182962; PubMed=12195358; DOI=10.1086/342048;
Chan P.K.S., Lam C.W., Cheung T.H., Li W.W.H., Lo K.W.K.,
Cheung J.L.K., Xu L.Y., Cheng A.F.;
"Human papillomavirus type 16 intratypic variant infection for cervical neoplasia in southern China.";
J. Infect. Dis. 186:696-700(2002).
                                                                                                                                                                                                  Human papillomavirus type Viruses; dsDNA viruses, no Alphapapillomavirus. MCBI_TaxID=333760;
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GO; GO:0042025; C:host cell nucleus; IEA.
GO; GO:0003677; F:DNA binding; IEA.
InterPro; IPR001334; E6.
Pfam; PF00518; E6; 1.
SEQUENCE 158 AA; 19173 NW; 14EBF5ADCFDB
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"Human papillomavirus type 16 intratypic variant infection for cervical neoplasia in southern China.";
J. Infect. Dis. 186:696-700(2002).
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Alphapapillomavirus.
             Copyrighted
Distributed
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07-FEB-2006,
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                             by the UniProt Consortium,
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Pred. No. 9.8e-73;
2; Mismatches 2;
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              Commons
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             see http://www.uniprot.org/terms
Attribution-NoDerivs License
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RESULT 15
Q77ZJ5_HPV16
ID Q77ZJ5_HPV16: PRELIMINARY; PRT; 151 AA.
AC Q77ZJ5;
DT Q5-JUL-2004, integrated into UniProtKB/TrEMBL.
DT Q5-JUL-2006, setry version 1.
DT Q7-FEB-2006, entry version 1.
DT Q7-FEB-2006, entry version 11.
DE E6 protein.
CC Viruses; dsDNA viruses, no RNA stage; Papillomavi.
CC Alphapapillomavirus.
CNCBI TaxID=333760;
RN [1]
RP NUCLEOTIDE SEQUENCE.
RR MEDLIME=9743747; PubMed=9292007;
RN [1]
RR Tornesello M.L., Buonaguro F.M., Meglio A., Buona, RA Beth-Giraldo E., Giraldo G.;
RR Tornesello M.L., Buonaguro From Ugandan patient type 16 in penile carcinomas from Ugandan patient type 16 in penile carcinomas from Ugandan patient type 16 in penile carcinomas from Ugandan patient CC Copyrighted by the UniProt Consortium, see http://CC Distributed under the Creative Commons Attribution CC Copyrighted by The UniProt Consortium, see http://CC Distributed under the Creative Commons Attribution CC Copyrighted by The UniProt Consortium, See http://CC Distributed under the Creative Commons Attribution CC Copyrighted by The UniProt Consortium, See http://CC Distributed under the Creative Commons Attribution CC Copyrighted by The UniProt Consortium, See http://CC Distributed under the Creative Commons Attribution CC Copyrighted by The UniProt Consortium, See http://CC Distributed under the Creative Commons Attribution CC CC Copyrighted by The UniProt Consortium, See http://CC Distributed under the Creative Commons Attribution CC CC Copyrighted by The UniProt Consortium, See http://CC Distributed under the Creative Commons Attribution CC CC Copyrighted Dy The UniProt Consortium, See http://CC Distributed under the Creative Commons Attribution CC CC Copyrighted Dy The UniProt Consortium, See http://CC Distributed under the Creative Commons Attribution CC CC Copyrighted Dy The UniProt Consortium, See http://CC Distributed UniProt Consortium, See http:/
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Best Local Similarity
Matches 148; Conserv
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Best Local Similarity
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MEDLINB=97437474; PubMed=9292007;

Tornesello M.L., Buonaguro F.M., Meglio A., Buonaguro L.,

Beth-Giraldo E., Giraldo G.;

"Sequence variations and viral genomic state of human papillomavirus type 16 in penile carcinomas from Ugandan patients.";

J. Gen. Virol. 78:2199-2208(1997).
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GO; GO:0042025; C:host cell nucleus; IEA.
GO; GO:0003677; F:DNA binding; IEA.
InterPro; IPR001334; E6.
Pfam; PF00518; E6; 1.
SEQUENCE 158 AA; 19188 MW; OIFEF5B1D21AF7EB CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Copyrighted by the UniProt Consortium, see http://www.uniprot.org/terms Distributed under the Creative Commons Attribution-NoDerivs License
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Viruses; dsDNA viruses, no RNA stage; Papillomaviridae;
Alphapapillomavirus.
NCBI_TaxID=333760;
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                                KKQRFHNIRGRWTGRCMSCCRSSRTRRETQL 151
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KKORFHNIRGRWTGRCMSCCRSSRTRRETQL 151
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98.0%;
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97.4%;
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Pred. No. 9.8e-73;
2; Mismatches 2; Indels
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Novel Fve	Amino aci	Amino aci	PV16	HPV16 E7	HPV16	Human pap	HPV16 E7	HPV 16 En	HPV prote	HPV16 E7	Anti-apop	HPV 16 E7		Human		Amino aci	Amino aci		Human pap	Human pap	Human pap

Amino acid sequence of a fusion protein designated E7E6PentM 15-JUL-2004 (first entry) ADO44070; ADO44070 standard; protein; 248 B

ALIGNMENTS

E6 protein; E7 protein; fusion protein; HPV16; HPV-associated cancer; cervical cancer; immune response; lower gastrointestinal tract cancer; anal cancer; reproductive system cancer; penile cancer; vulvar cancer;

WO2004030636-A2 Synthetic Human papillomavirus type 16.

03-OCT-2002; 2002US-0415929P 02-OCT-2003; 2003WO-US031726. 15-APR-2004

(AMHP) WYETH HOLDINGS CORP.

WPI; 2004-316328/29. N-PSDB; ADO44071. Smith L, Cassetti MC;

New polypeptide comprising human papillomavirus E6 and E7 polypeptides, useful for treating or preventing human papillomavirus (HPV)-associated cancers, e.g. cervical cancer.

Claim 22; Page 75-76; 101pp; English.

RESULT 1
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AC AMIN The present sequence represents a fusion protein, comprising E7 and EV polypeptides from human papillomavirus type 16 (HPV16). The fusion protein is designated E7B6PentM, and comprises an E7 amino terminus (where residues 24, 26 and 91 have been replaced with glycine) and an carboxy terminus (where residues 63 and 106 have been replaced with glycine). E7E6PentM is representative of fusion proteins of the invention. The specification describes human papillomavirus E6 and E7 E6 E

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                                The invention relates to a novel vaccine composed of an antigen protein and a second protein as an s-(methyl mercury)-1-cysteine (CMH class II) ligand. The second protein is taken from a group including human Lymphocyte Activation Gene (hLAG)-3. The first protein is a viral or bacterial antigen, a tumor antigen, parasitic antigen, or their mixtures. The viral antigens can be for hepatitis B (HBV), human papillomavirus (HPV), hepatitis C (HCV), human immunodeficiency virus (HIV), Epstein-Barr virus (EBV), cytomegalovirus (CMV), and their combinations. The bacterial antigens can be intracellular bacteria of tuberculosis, leprosy and listeria. A vaccine of the invention has virucide, and antibacterial
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Therapeutic vaccine, for viral and bacterial conditions, comprises antigen protein and a viral or bacterial protein, coupled together stable hydrogen or covalence bonds in biological media.
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                                                                                                                                                                                                                                                                                              AAX78791-X78801 represent nucleic acid sequences which encode novel constructs comprising an E6 or E7 protein or E6/E7 fusion protein from HPV (represented in AAY25375-Y25386). These constructs are optionally linked to an immunological fusion partner and an immunomodulatory CpG oligonuclectide. The products of the invention can be used to induce an immune response in a patient to an HPV antigen. They can also be used for preventing or treating HPV induced tumours
                                                                                                                                                                                                                                                  Sequence 220 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    HPV fusion protein
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAY25378 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Example V; Page 51; 62pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Composition comprising induce immune response
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   N-PSDB;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           18-DEC-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             08-JUL-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WO9933868-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human papillomavirus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAY25378;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (SMIK ) SMITHKLINE BEECHAM BIOLOGICALS
                                                                                                                                                                              Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 antigen; prevention;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1999-405485/34.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 61
                                                                                                                                                       95;
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95; Conserv
                                                                                                                                                                              Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAX78794
  CDSTLRLCVQSTHVDIRTLEDLLMGTLGIVXPICSQKP 98
                                                                              MHGDTPTLHEYMLDLQPETTDLYXYXQLNDSSEEEDEIDGPAGQAEPDRAHYNIVTFCCK 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MHGDTPTLHEYMLDLQPETTDLYXYXQLNDSSEEEDEIDGPAGQAEPDRAHYNIVTFCCK
                                              MHGDTPTLHEYMLDLQPETTDLYGYQQLNDSSEEEDEIDGPAGQAEPDRAHYNIVTFCCK 173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CDSTLRLCVQSTHVDIRTLEDLLMGTLGIVCPICSQKP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CDSTLRLCVQSTHVDIRTLEDLLMGTLGIVXPICSQKP 98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MHGDTPTLHEYMLDLQPETTDLYGYGQLNDSSEEEDEIDGPAGQAEPDRAHYNIVTFCCK
                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gerard
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             97GB-00027262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           98WO-EP008563
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      D1/3-E7-Mutated (C24G, E26Q) /HPV16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      protein; 220
                                                                                                                                                                           99.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        96.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CMG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         treatment
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          HPV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         English.
                                                                                                                                                    0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 <u>,,</u>
                                                                                                                                                                              Score 513; DB 2;
Pred. No. 4.6e-57;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 513;
Pred. No. 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  E7 or
                                                                                                                                                       Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ₽
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             E6/E7 fusion protein from HPV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 9;
.6e-57;
                                                                                                                                                                                                   Length 220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 98;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   98
                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                    <u>.</u>
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                                                                                                                                                                                                                                                                                                                                  be used for
                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   60
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RESULT 5
AED52640
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                                                                                                                                                                                            Query Match
Best Local S
Matches 95
                                                                                                                                                                                                                                                                 This sequence represents a chimeric E6 or E7 protein or E6/E7 fusion protein from Human papillomavirus (HPV) linked to an immunological fusion partner, in this case, a fragment of the Haemophilus influenzae B protein D. The sequence also contains a histidine tag at the C-terminus of the encoded protein. The protein can be used in a vaccine, for immunotherapeutically treating HPV induced tumour lesions (benign or malignant) and preventing HPV viral infection. (Updated on 17-OCT-2003 to standardise OS field)
                                                                                                                                                                                                                                                                                                                                                                                                      Human Papilloma Virus (HPV) fusion proteins - useful in vaccines treatment or prophylaxis of HPV induced lesions.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Bruck C, Cabezon Sil
Lombardo-Bencheikh A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Chimeric; E6; b.
           AED52640;
                                  AED52640 standard;
                                                                                                                                                                                                                                             Sequence 220 AA;
                                                                                                                                                                                                                                                                                                                                                                                Disclosure; Fig 8; 95pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              04-MAR-1999.
                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 1999-190587/16.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    17-AUG-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO9910375-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Chimeric.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          17-OCT-2003
22-JUN-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAY02634 standard; protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (SMIK ) SMITHKLINE BEECHAM BIOLOGICALS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             22-AUG-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human papillomavirus.
Haemophilus influenzae.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Prot.D1/3-E7-mut(C24G,E26Q)/HPV16 protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAY02634;
                                                                                                                                                                                                       Local Similarity
                                                                                                                                              114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  174
                                                                                               174
                                                                                                                      61
                                                                                                                                                                                              95;
                                                                                                             CDSTLRLCVQSTHVDIRTLEDLLMGTLGIVXPICSQKP 98
                                                                                                                                            MHGDTPTLHEYMLDLQPETTDLYGYQQLNDSSEEEDEIDGPAGQAEPDRAHYNIVTFCCK 173
                                                                                                                                                           MHGDTPTLHEYMLDLQPETTDLYXXXQLNDSSEEEDEIDGPAGQAEPDRAHYNIVTFCCK 60
                                                                                            CDSTLRLCVQSTHVDIRTLEDLLMGTLGIVCPICSQKP 211
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CDSTLRLCVQSTHVDIRTLEDLLMGTLGIVCPICSQKP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         B6; E7; fusion protein; protein D; vaccine
esion; benign; malignant; virus; infection.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Cabezon Silva T,
                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (revised)
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             97GB-00017953.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    98WO-EP005285
                                 protein;
                                                                                                                                                                                                       99.2%;
                                  220
                                                                                                                                                                                            <u>..</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     220
                                                                                                                                                                                          Score 513; DB 2; I
Pred. No. 4.6e-57;
0; Mismatches 3;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gerard CMG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       vaccine; immunotherapy;
                                                                                                                                                                                                                  Length 220;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                211
                                                                                                                                                                                            Indels
                                                                                                                                                                                           0
                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                    for
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RESULT 6
AD044068
ID AD04
XX
AC AD04
XX
DT 15-J
XX
DE Amin
XX
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                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                     Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                          The invention relates to human Papilloma virus (HPV) fusion proteins, linked to an immunological fusion partner that provides T helper epitopes to the HPV antigen. Vaccine formulations comprising the fusion proteins are useful in the treatment or prophylaxis of HPV induced lesions (papillomas, warts and cervical cancer). HPV 16 (and HPV 18) E6 and E7 proteins (singly, as an E6-E7 fusion or mutated) were fused to either Haemophilus influenzae D protein (20-127), the C-terminus of Streptococcus pneumoniae Lyth protein (CLyth) or thioredoxin. The present sequence represents a mutated HPV-H. influenzae D protein, fusion protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Synthetic. Chimeric.
                                      15-JUL-2004
             Amino acid sequence of a fusion protein designated
                                                                                                                                                                                                                                                                                                         Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2005-557648/57.
N-PSDB; AED52639.
                                                                                      ADO44068
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Example 8; Fig 8; 96pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Vaccine.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Tyrrell
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    22-AUG-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              24-AUG-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       04-MAR-2005.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Misc-difference
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Haemophilus influenzae; strain 772.
Human papillomavirus type 16.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Fusion protein; vaccine; papilloma; cytostatic; papillomavirus infection; virucide; uterine cervix tumor; E7; mutein; D protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Fusion protein D1/3-E7-His(HPV16), C137G/E139Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             29-DEC-2005 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                IN9801903-I4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Misc-difference
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (SMIK ) SMITHKLINE BEECHAM BIOLOGICALS
                                                                                                                                                                                                                                                                   Local
                                                                                                                                                                                                      114
                                                                                                                                                                              ន្ន
                                                                                                                                                                                                  invention.
                                                                                                                                                                                                                                                      . Similarity
95; Conserv
                                                                                      standard; protein; 248
                                                                                                                                                   CDSTLRLCVQSTHVDIRTLEDLLMGTLGIVCPICSQKP 211
                                                                                                                                                                     CDSTLRLCVQSTHVDIRTLEDLLMGTLGIVXPICSQKP 98
                                                                                                                                                                                                                                                                                                         220
                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                         AA;
                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    97EP-00179535
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              98IN-CH001903
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /note= "Wild-type Cys
139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /note= "Wild-type Glu substituted by Gln"
                                                                                                                                                                                                                                                                  99.2%;
                                                                                                                                                                                                                                                       0
                                                                                                                                                                                                                                                                  Score 513; DB 9;
Pred. No. 4.6e-57;
                                                                                                                                                                                                                                                       Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                substituted by Gly"
                                                                                                                                                                                                                                                                              Length 220;
                                                                                                                                                                                                                                                       Indels
             E7E6TetM
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                                                                                                                                                                                                                                                      Gaps
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RESULT 7
ADA27366
ID ADA2
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AC ADA2
XX
DT 20-N
XX
DE HPV-
XX
XX
Cell
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CC The present sequence represents a fusion protein, comprising E7 and E6 CC polypeptides from human papillomavirus type 16 (HPV16). The fusion CC protein is designated E7E6TetM, and comprises an E7 amino terminus (where CC residues 24 and 26 have been replaced with glycine) and an E6 carboxy CC terminus (where residues 63 and 106 have been replaced with glycine). CC E7E6TetM is representative of fusion proteins of the invention. The CC specification describes human papillomavirus E6 and E7 polypeptides, CC where the E7 polypeptide has mutations at any one or more of the amino CC acids corresponding to amino acids 24, 26 or 91 of the sequence given in CC ADO44073 and the E6 polypeptide has no mutations or has mutations at any CC one or more of the amino acids corresponding to amino acids 63 or 106 of CC there sequence given in ADO44072. The polypeptides of the invention are CC useful for treating or preventing human papillomavirus (HPV)-associated CC cancers, such as cervical cancer. The fusion proteins and nucleic acids CC cancers, such as cervical cancer. The fusion proteins and nucleic acids CC cancers, E9, anal cancer, and other cancers of the reproductive system, including penile and vulvar cancers.
                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New polypeptide comprising human papillomavirus E6 and E7 polypeptides, useful for treating or preventing human papillomavirus (HPV)-associated cancers, e.g. cervical cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             E6 protein; E7 protein; fusion protein; HPV16; HPV-associated cancer; cervical cancer; immune response; lower gastrointestinal tract cancer; anal cancer; reproductive system cancer; penile cancer; vulvar cancer.
 cell line; American Type Culture Collection PTA-4047; ATCC-4047;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human papillomavirus type 16. Synthetic.
                                    HPV-16 L2/E7/E2 fusion protein SEQ ID NO:9.
                                                                             20-NOV-2003
                                                                                                                                                    ADA27366 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 248 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 22; Page 73-74; 101pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2004-316328/29.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          03-OCT-2002; 2002US-0415929P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              02-OCT-2003; 2003WO-US031726
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (AMHP ) WYETH HOLDINGS CORP.
                                                                                                                                                                                                                                                                                  61
                                                                                                                                                                                                                                                                                                                                                                                               95;
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                                                                                                                                                                                                                                                                                                                                                                                                                Similarity
                                                                                                                                                                                                                                                                     CDSTLRLCVQSTHVDIRTLEDLLMGTLGIVXPICSQKP
                                                                                                                                                                                                                                                                                                                                            MHGDTPTLHEYMLDLQPETTDLYXYXQLNDSSEEEDEIDGPAGQAEPDRAHYNIVTFCCK 60
                                                                                                                                                                                                                                                                                                                       MHGDTPTLHEYMLDLQPETTDLYGYGQLNDSSEEEDEIDGPAGQAEPDRAHYNIVTFCCK 60
                                                                                                                                                                                                                                            CDSTLRLCVQSTHVDIRTLEDLLMGTLGIVCPICSQKP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Cassetti MC;
                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                             (first entry)
                                                                                                                                                    protein;
                                                                                                                                                                                                                                                                                                                                                                                                              99.2%;
                                                                                                                                                      805
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                                                                                                                                                                                                                                                                                                                                                                                             Score 513; DB 8;
Pred. No. 5.3e-57;
0; Mismatches 3
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Matches
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                         The present invention describes a cell line comprising a cell that is a clone, derivative, mateant and/or transfectant of a cell line designated American Type Culture Collection (ATCC) PTA-4047. The cell upon culture grows continuously and retains the identifying characteristics of the cell line designated ATCC-4047. Also described is a process of making a cell line. The insect cell line is useful in replicating baculoviruses, as a host substrate for baculovirus plaque assays, as a source of insect proteins, acts as a depot for cell transfection to produce recombinant baculoviruses, and in expressing viral recombinant proteins and virus-like particles expressed from the cell line are useful as pharmaceutical compositions, vaccines or diagnostic reagents. The present sequence represents a human papillomavirus type 16 (HPV-16) 12/E7/E2 fusion protein, which is used in the exemplification of the present invention.
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14-FEB-2002;
14-FEB-2002;
14-FEB-2002;
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14-FEB-2002;
14-FEB-2002;
                                                                                                                                                                                                                                                                                                                  Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New insect cell line designated ATCC PTA-4047, useful for replicating baculoviruses to produce large amounts of recombinant proteins of medical, pharmaceutical and veterinary importance.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    14-FEB-2002;
14-FEB-2002;
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Human papillomavirus
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Disclosure; Page 59-60; 63pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2003-646475/61.
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14-FEB-2002;
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531
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                                                                                                                                                                                                             95;
                                                                                                                                   1 MHGDTPTLHEYMLDLQPETTDLYXYXQLNDSSEEEDEIDGPAGQAEPDRAHYNIVTFCCK 60
                                CDSTLRLCVQSTHVDIRTLEDLLMGTLGIVXPICSQKP 98
                                                                                                                                                                                                                                                                                                                  805 AA;
CDSTLRLCVQSTHVDIRTLEDLLMGTLGIVCPICSQKP 568
                                                                                                        MHGDTPTLHEYMLDLQPETTDLYGYEQLNDSSEEEDEIDGPAGQAEPDRAHYNIVTFCCK
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2002US-0356151P.
2002US-0356154P.
2002US-0356154P.
2002US-0356157P.
2002US-0356161P.
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2002US-0356135P.
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2002US-0356126P.
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                                                                                                                                                                                                                                   Score 513; DB 6;
Pred. No. 2.4e-56;
                                                                                                                                                                                                             Mismatches
                                                                                                                                                                                                                                                           Length 805
                                                                                                                                                                                                             Indels
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RESULT

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The present invention describes a codon optimised polynucleotide encoding CC a viral capsid protein that self assembles into a virus-like particle CC (VLP) that exhibits conformational antigenic epitopes capable of raising neutralising antibodies, where the VLP is expressed from a host cell CC extracellularly. Also described: (1) a vector comprising the above codon optimised polynucleotide operably liked to a eukaryotic or prokaryotic cophanised polynucleotide operably liked to a eukaryotic or prokaryotic cophanised polynucleotide operably liked to a eukaryotic or prokaryotic cophanised polynucleotide of replication in prokaryotic and/or CC enterprised papillomavirus related disease or disorder, comprising a CC multiplicity of VLPs that exhibit conformational antigenic epitopes, and a carrier, diluent or adjuvant; (4) a diagnostic kit for detecting a papillomavirus infection, comprising a multiplicity of VLPs that exhibit conformational antigenic epitopes, and a detection agent comprising a CC detectable label; (5) a method for preparing the above codon optimised polynucleotide, comprising replacing codons that are underutilised in insect cells with codons that are unilised a high levels in insect cells, to create an initially-modified nucleotide sequence by choosing a preferred codon for the initially-modified sequence, where the ratio of GC nucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      14-FEB-2002;
14-FEB-2002;
14-FEB-2002;
                                                                                                                                                                                                                                                                                                                                                                                                           New codon optimized polynucleotide encoding a viral capsid protein that self assembles into a virus-like particle, useful for diagnosing, preventing or treating human papillomavirus infections or associated
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2003-689664/65.
N-PSDB; ADA92552.
                                                                                                                                                                                                                                                                                                                                                              Disclosure;
                                                                                                                                                                                                                                                                                                                                                                                               disorders.
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14-FEB-2002;
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14-FEB-2002;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           antigenic; human papillomavirus infection; virucide; vaccine; gene therapy; human papillomavirus type 16; dysplasia; infection; HPV-16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             codon optimised; viral capsid protein; virus-like particle; VLP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              HPV-16 L2/E7/E2 fusion amino acid sequence SEQ ID
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2002US-0356118P.
2002US-0356113P.
2002US-0356123P.
2002US-0356126P.
2002US-0356135P.
2002US-0356135P.
2002US-0356150P.
2002US-0356150P.
2002US-0356154P.
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2002US-0356157P.
2002US-0356161P.
2002US-0356162P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  805
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RESULT 9
ADA14293
ID ADA1
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Best Local (
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14-FEB-2002;
14-FEB-2002;
14-FEB-2002;
14-FEB-2002;
14-FEB-2002;
14-FEB-2002;
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14-FEB-2002;
14-FEB-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    preventing a papillomavirus related disease or disorder, or for protecting an individual against a papillomavirus infection, comprising administering to an individual an amount of the composition or vaccine cited above. The VLP has virucide activity and can be used in vaccines and in gene therapy. The composition and methods of the present invention are useful in diagnosing, preventing or treating human papillomavirus infections or associated disorders, such as dysplasia. The present sequence represents an HPV-16 codon optimised 12/E7/E2 fusion amino acid sequence from the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    pairs to AT nucleotide pairs in the further-modified nucleotide sequence trends towards about 1:1, where the number of palindromic and stem-loop DNA structures in the further-modified nucleotide sequence is minimised, and where the number of transcription and post-transcription repressor elements are minimised, and (6) methods for treating, ameliorating or
                                                                                                                                                                                                                                                                                                                                                                                                                 purification; recombinant extracellular virus-like particle; recombinant intracellular virus-like particle; virus-like particle; VLP; virucide; vaccine; gene therapy; human papillomavirus; HPV; infection; dysplasia; HPV-16; fusion protein.
                                                                                                                                                                                                                                                                                                                                                                                          Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       HPV-16 L2/E7/E2 fusion protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      06-NOV-2003 (first entry)
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                           (NOVA-) NOVAVAX INC
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                                                                                                                                                                                                                                                                                                                                                                        papillomavirus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MHGDTPTLHEYMLDLQPETTDLYGYEQLNDSSEEEDEIDGPAGQAEPDRAHYNIVTFCCK 530
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            805 AA;
                                                   2002US-0356126P.
2002US-0356133P.
2002US-0356150P.
2002US-0356151P.
2002US-0356154P.
2002US-0356156P.
2002US-0356156P.
2002US-0356157P.
2002US-0356161P.
2002US-0356161P.
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2002US-0356119P
2002US-0356123P
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                                                                                                                                                                                                                                                         2002US-0356113P
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Pred. No. 2.4e-56;
0; Mismatches 3
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Robinson RA,

Thompson

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RESULT 10
AAB38618
ID AAB38
XX AAB38
AC AAB38
XX VACCI
CONTRACTOR VACCI
KW VACCI
KW VITUC
XX VACCI
KW VITUC
XX Human
OS Synth
XX WO20C
XX JA-FE
PR 114-FE
PR 114-FE
PR 114-FI
PR 114-FI
PR 114-FI
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The present invention describes a method for purifying a recombinant CC extracellular or intracellular virus-like particle (VLP). The method CC comprises harvesting a cell suspension comprising cells containing a CC plurality of VLPs to produce a harvested supernatant, optionally CC disrupting the harvested cells to produce cell lysates containing the CC VLP, clarifying the harvested supernatant, concentrating the clarified CC supernatant, diafiltering the concentrated supernatant, and recovering the purified recombinant VLP. Also described: (1) a cell line designated CC as Sf-9S deposited as American Type Culture Collection (ATCC) PTA-4047; CC (2) producing the cell line described above; (3) host cells that express CC one or more recombinant gene products with an enhanced yield; (4) producing a foreign protein in an insect cell; (5) nucleic acid sequences CC that correspond to and code for human papillomavirus (HPV) polypeptides; CC and (6) pharmaceutical compositions comprising an amount of the crecombinant viral gene products, VLPs, agonists, or the CC active fragment of a viral gene product. The VLPs have virucide activity, and the seed in vaccines and in gene therapy. The method is useful in cisolating and purifying expressed viral gene products, including VLPs, in CC virocating or treating HPV infections and associated symptoms like CC dysplasia. The present sequence represents an HPV-16 L2/E7/E2 fusion CC virocatin, which is given in the exemplification of the present invention.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local :
    14-FEB-2002;
14-FEB-2002;
14-FEB-2002;
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                                                                                                                                                                                                             Synthetic
                                                                                                                                                                                                                           Human papillomavirus
                                                                                                                                                                                                                                                                   Vaccine; humoral immunity; cell-mediated immunity; gene therapy; HPV; virucide; papillomavirus infection; Human papillomavirus; fusion prot
                                                                                  14-FEB-2003; 2003WO-US004473.
                                                                                                                                                                    WO2003068163-A2
                                                                                                                                                                                                                                                                                                                               HPV-16 L2/E7/E2 fusion protein.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAE38618 standard; protein;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MHGDTPTLHEYMLDLQPETTDLYXYXQLNDSSEEEDEIDGPAGQAEPDRAHYNIVTFCCK 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CDSTLRLCVQSTHVDIRTLEDLLMGTLGIVCPICSQKP
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      2002US-0356113P.
2002US-0356118P.
2002US-0356119P.
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Pred. No. 2.4e-56;
0; Mismatches 3
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RESULT 11
AAAR227
ID AAR22
XX AAR22
XC AAR22
XX 25-MA
DT 21-SE
XX HUMAN
CK HUMAN
XX HUMAN
XX Synth
OS HOMO
XX WO92(
XX WO92(
XX WO92(
XX YO92
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Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        a recombinant viral capsid protein that encapsulates a recombinant viral protein during self assembly into a chimeric virus-like particle and exhibiting conformational antigenic epitopes capable of eliciting neutralising antibodies. The vaccine comprising the chimeric virus-like particles are useful for inducing immunity (humoral and/or cell-mediated immunity) against papillomavirus infection. The invention is also useful in gene therapy. The present sequence is HPV (human papillomavirus)-16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    14-FEB-2002;
14-FEB-2002;
14-FEB-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 805 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New chimeric virus-like particles comprising a recombinant viral capsid protein encapsulating a recombinant viral protein, useful for inducing humoral and/or cell-mediated immunity against papillomavirus infection.
                     26-SEP-1991;
                                                                                                                                                                                                                                                  HPV E7
                                                                                                                                                                                                                                                                                          25-MAR-2003
21-SEP-1992
                                                                                                                                                                                                                                                                                                                                                                                               AAR22767 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The present invention relates to chimeric virus-like particle comprising a recombinant viral capsid protein that encapsulates a recombinant viral
                                                                02-APR-1992.
                                                                                                      WO9205248-A
                                                                                                                                                                     Synthetic.
                                                                                                                                                                                                       Human; papillomavirus; immunogenic; cervical; warts; carcinoma; cancer
                                                                                                                                                                                                                                                                                                                                                      AAR22767;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               14-FEB-2002;
14-FEB-2002;
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14-FEB-2002;
                                                                                                                                             Homo sapiens.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2003-689598/65.
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                                                                                                                                                                                                                                                  peptide.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MHGDTPTLHEYMLDLQPETTDLYXYXQLNDSSEEEDEIDGPAGQAEPDRAHYNIVTFCCK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             HGDTPTLHEYMLDLQPETTDLYGYEQLNDSSEEBDEIDGPAGQAEPDRAHYNIVTFCCK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         fusion protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CDSTLRLCVQSTHVDIRTLEDLLMGTLGIVCPICSQKP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Page 122-123; 126pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2002US-0356154P.
2002US-0356156P.
2002US-0356157P.
2002US-0356161P.
2002US-0356162P.
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2002US-0356135P.
2002US-0356150P.
2002US-0356151P.
2002US-0356152P.
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(first entry)
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2002US-0356126P.
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                       91WO-US007081.
                                                                                                                                                                                                                                                                                                                                                                                             peptide;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 513; DB 7;
Pred. No. 2.4e-56;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The peptide is the sequence of the human papillomavirus HPV 16 E7 nucleoprotein. Peptides corresponding to regions (pref. epitopic regions) of HPV 16 E7 were synthesised by standard Merrifield synthesis. Examples of such peptides are E7 1-10, 29-50 or 70-81. Compositions contg. these peptides, antibodies against the peptides, or recombinant cells contg. the gene encoding the immunogenic peptides may be utilised in methods for inhibiting and treating HPV infection and tumour initiation and progression e.g. in the prevention or retardation of cervical warts and cervical carcinoma resulting from HPV infection. See also AAR22766. (Updated on 25-MAR-2003 to
Use of papilloma-virus E7 protein or fragments for the therapy of papilloma-virus disease - for the regression of tumours e.g. removal warts from udders or mouth of milking cows or for treatment of horses
                                                                                                                                 08-APR-1992;
                                                                                                                                                                                    28-OCT-1993
                                                                                                                                                                                                                                      Synthetic
                                                                                                                                                                                                            WO9320844-A1
                                                                                                                                                                                                                                                             Tumours; cows;
                                                                                                                                                                                                                                                                                     Human papillomavirus 16 E7 protein and fragments
                                                                                                                                                                                                                                                                                                                25-MAR-2003
21-MAY-1994
                                                                                                                                                                                                                                                                                                                                                      AAR42361;
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                                                      WPI; 1993-351368/44
                                                                                                         (CANC-) CANCER
                                                                                                                                                                                                                                                                                                                                                                            AAR42361 standard; protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             correct PI field.)
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                                                                                                                                                                                                                                                                                                              (revised)
(first entry)
                                                                                                         RES
                                                                                                                                 92GB-00007701
                                                                                                                                                          93WO-GB000679
                                                                                                                                                                                                                                                             horses; donkeys; regression; udder warts; HPV16.
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                                                                                                         CAMPAIGN TECHNOLOGY
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96.9%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 English.
                                                                                                                                                                                                                                                                                                                                                                              98
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Pred. No. 2.2e-57;
0; Mismatches 3;
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prophylaxis
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RESULT 13
AAW46886
ID AAW46
XX AAW46
XX AAW46
XX DT 15-UU
XX DE Amino
XX E7 on
KW Cycli
XX Cy
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                                                                         The present sequence represents Human papillomavirus (HPV), strain 16, oncoprotein. The proliferative state of a cell transformed with HPV can be evaluated in the following manner. Cyclin/cyclin-dependent kinase complexes containing protein p21CIP1 (AAW46887-88) are isolated from the transformed cell, and the HPV E7 oncoprotein added to the isolated protein. Cyclin/cyclin-dependent kinase complexes are isolated from an untransformed cell that is substantially homogenic with the transformed cell, and the HPV E7 oncoprotein added. The kinase activities of the 2 cell, and the HPV E7 oncoprotein added. The kinase activities of the 2
                                                                                                                                                                                                                                                                                                                                                                                             Evaluation of proliferative state of cells transformed with human papilloma virus - by determining cyclin-dependent kinase activity by E7 onco-protein.
  samples are measured, where a proliferating transformed cell has a greater kinase activity that the untransformed cell. The method is used for determining the extent of interaction and/or inactivation between a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   E7 oncoprotein; proliferative state; HPV; kinase activity; cyclin/cyclin-dependent kinase; p2lCIP1; interaction; inactivation; cyclin/cyclin-dependent kinase inhibitor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (HARD )
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                                                                                                                                                                                                                                                                                                                                     Disclosure; Col 19-20; 14pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Muenger K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       07-APR-1998.
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15-JUN-1998
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HARVARD COLLEGE.
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No. 2.2e-57;
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RESULT 14
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                            The invention relates to a novel assay for identifying compounds which inhibit viral replication and pathogenesis by increasing proteasomal degradation of viral components or molecules induced by viral infection. The method comprises reacting a compound with proteasomal protein (20% proteasomes separately with or without 19% and 11% complexes), viral gene product, and protein or peptide substrates; measuring protease activity; and identifying the compound as an inhibitor if the protease activity of the assay system is increased. The assays of the invention can be used to identify compounds which inhibit viral replication and pathogenesis, and modulate and/or regulate proteasome activity. Compounds which increase proteasomal degradation of viral components or molecules induced by viral infection are of value in the treatment of viral disease. Compounds which modulate proteasomal nuclease activity have use in the treatment of the treatment of the proteasomal nuclease activity have use in the treatment of the proteasomal nuclease activity have use in the treatment of the proteasomal nuclease activity have use in the treatment of the proteasomal nuclease activity have use in the treatment of the proteasomal nuclease activity have use in the treatment of the proteasomal nuclease activity have use in the treatment of the proteasomal nuclease activity have use in the treatment of the proteasomal nuclease activity have use in the treatment of the proteasomal nuclease activity have use in the treatment of the proteasomal nuclease activity have use in the treatment of the proteasomal nuclease activity have use in the treatment of the proteasomal nuclease activity have use in the treatment of the proteasomal nuclease activity have use in the treatment of the proteasomal nuclease activity have use in the treatment of the proteasomal nuclease activity have use in the treatment of the proteasomal nuclease activity have use in the proteasomal nuclease activity have use in the proteasomal nuclease activity have use in the prot
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Mouzeyar S
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           HPV E7 oncoprotein; viral infection; in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              cyclin/cyclin-dependent kinase inhibitor and the HPV E7 oncoprotein and thus evaluating the proliferative state of a transformed cell. (Updated on 25-MAR-2003 to correct PI field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Disclosure;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human papillomavirus
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13-JUN-1998;
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, Nicolas
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inflammatory disease; anti-inflammatory; anti-HIV;
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          and AIDS in HIV
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Pred. No. 2.2e-57;
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       infected patients.
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RESULT 15
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                                                      genital warts such as condylomata acuminata. However, severity of disease caused by the papillomavirus is de strain causing the infection. The present sequence reppapillomavirus 16 E7 protein
                                                                                                                                                                     The present invention describes a fusion protein comprising 2 amino acids sequences from 2 different papillomavirus specific (PVS) proteins. The fusion protein may be administered for preventing and treating papillomavirus infections in humans and animals. Papillomaviruses are implicated in the pathology of malignant tumour formation in the anogenital tract (of these tumours, cervical cancer is the most frequent (500000 cases/year) and in the formation of precursor lesions of cervical intraepithelial neoplasia (CIN). Papillomaviruses also cause benign
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Fusion proteins comprising papillomavirus specific proteins useful vaccinating against malignant tumors of the anogenital tract such \epsilon cervical carcinomas.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human papillomavirus.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     N-PSDB;
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                                                                                                                                                                                                                                                                                                                                                                                                                                         Example 1; Page 34; 46pp; English
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DB; AAZ48175.
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0; Mismatches
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Pred. No. 2.2e-57;
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1: /EMC Celerra SIDS3/ptodata/2/iaa/5_COMB.pep:*

2: /EMC_Celerra_SIDS3/ptodata/2/iaa/6_COMB.pep:*

3: /EMC_Celerra_SIDS3/ptodata/2/iaa/7_COMB.pep:*

4: /EMC_Celerra_SIDS3/ptodata/2/iaa/H_COMB.pep:*

5: /EMC_Celerra_SIDS3/ptodata/2/iaa/RE_COMB.pep:*

6: /EMC_Celerra_SIDS3/ptodata/2/iaa/RE_COMB.pep:*

7: /EMC_Celerra_SIDS3/ptodata/2/iaa/RE_COMB.pep:*
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US-08-075-541D-42
US-08-075-541D-42
US-09-382-616A-1
US-09-980-764-4
US-09-980-118A-4
US-09-980-23A-12
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US-09-613-303-12
US-09-613-303-35
US-08-485-885-12
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US-09-613-303-8	US-10-201-764-19	US-09-566-420-19	US-10-267-311-53	US-09-613-303-53	US-10-267-311-51	US-09-613-303-51	US-10-267-311-17	US-09-613-303-17	US-10-267-311-19	US-09-613-303-19	US-09-485-885-14	US-09-485-885-6	US-10-267-311-25	US-09-613-303-25	US-10-267-311-33	US-09-613-303-33	US-09-501-097A-25	US-U9-30/-3U9A-1
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ALIGNMENTS

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Sequence 8, Application US/09485885;
Patent No. 6342224;
GENERAL INFORMATION:
APPLICANT: Bruck, Claudine
APPLICANT: Cabezon Silva, Teresa
APPLICANT: Delisse, Anne-Marie Eva Fernande
APPLICANT: Gerard, Catherine Marie Ghislaine
APPLICANT: Lombardo-Bencheikh, Angela
TITLE OF INVENTION: Vaccine
FILE REFERENCE: B45107
CURRENT APPLICATION NUMBER: US/09/485,885
CURRENT FILING DATE: 2000-02-18
PRIOR APPLICATION NUMBER: GB 9717953.5
PRIOR FILING DATE: 1998-08-17
PRIOR APPLICATION NUMBER: GB 9717953.5
PRIOR FILING DATE: 1997-08-22
NUMBER OF SEQ ID NOS: 23
                                                                                                                                                                                  RESULT 2
US-08-406-248-6
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; ORGANISM: Homo sapien
US-09-485-885-8
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US-09-485-885-8
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; SEQ ID NO 8
; LENGTH: 220
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Best Local S
Matches 95
Sequence 6, Application US/08406248
Patent No. 5736318
GENERAL INFORMATION:
APPLICANT: Munger, Karl
APPLICANT: Jones, D. Leanne
TITLE OF INVENTION: METHOD AND KIT FOR EVALUATING
TITLE OF INVENTION: TRANSFORMED CELLS
NUMBER OF SEQUENCES: 6
                                                                                                                                                                                                                                                                                                                                                                                                                                               / Match 99.2%;
Local Similarity 96.9%;
nes 95; Conservative
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Pred. No. 1.8e-59;
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
                                                                                                                              ZIP: 19103-2398
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                    APPLICANT: TINDLE, ROBERT
APPLICANT: FERNANDO, GERMAIN
APPLICANT: FERNANDO, GERMAIN
TITLE OF INVENTION: SUBUNIT PAPILLOMA VIRUS VACCINE
TITLE OF INVENTION: PEPTIDES FOR USE THEREIN
NUMBER OF SEQUENCES: 56
CLASSIFICATION: 424
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                     SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/075,541D
FILING DATE: 10-JUN-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME: McDaniels, Patricia A.
REGISTRATION NUMBER: 33,194
REGERENCE/DOCKET NUMBER: HAZ
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-330-1300
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CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/406,248
FILING DATE:
CLASSIFICATION: 436
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MEDIUM TYPE: Floppy
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STREET: 200 St
CITY: Boston
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TYPE: amino acid
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COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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                                                                                                                                                                                                                                               PENNSYLVANIA
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ilarity 96.9%;
Conservative
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 AU pk 3876
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Pred. No. 8e-60;
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PRIOR APPLICATION NUMBER: 09/382,616
PRIOR FILING DATE: 1999-08-25
PRIOR FILING DATE: 1999-08-25
PRIOR FILING DATE: 199-08-25
PRIOR FILING DATE: 1987
PRIOR FILING PRIOR PRIOR
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US-09-382-616A-1
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Sequence 4, Application US/08944368A Patent No. 6228368
GENERAL INFORMATION:
APPLICANT: Gissman, et al.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GENERAL INFORMATION:
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CURRENT APPLICATION NUMBER: US/09/382,616A
CURRENT FILING DATE: 1999-08-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Fisher, Christopner
APPLICANT: He, Wanxia
APPLICANT: He, Wanxia
TITLE OF INVENTION: Methods to Identify Anti-Viral Agents
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEFAX: 215-567-2991
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
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PRIOR APPLICATION DATA:
APPLICATION NUMBER: pct/au91/00575
FILING DATE: 12-DEC-1991
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MOLECULE TYPE: peptide
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TELECOMMUNICATION INFORMATION:
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TYPE: amino acid
STRANDEDNESS: single
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Pred. No. 8e-60;
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Pred. No. 8e-60;
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; MOLECULE TYPE: protein
US-08-944-368A-4
                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 4, Application US/09820764
Patent No. 6352696
GENERAL INFORMATION:
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
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ATTORNEY/AGENT INFORMATION:
NAME: Williams Jr., Joseph A.
REGISTRATION NUMBER: 38,659
REFERENCE/DOCKET NUMBER: 2701:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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TITLE OF INVENTION: FOI
NUMBER OF SEQUENCES: 20
CORRESPONDENCE ADDRESS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SOFTWARE: PatentIn Release #1.0, Version #1.30 CURRENT APPLICATION DATA:
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TYPE: amino acid
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COUNTRY: United States of America ZIP: 60606-6402
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ZIP: 20007-5109
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIN Release #1.0, Version
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/820,764
FILING DATE: 30-Mar-2001
                                                                                                                                                                                                                                         CORRESPONDENCE ADDRESS:
ADDRESSEE: FOLEY & LARDNER
STREET: 3000 K Street, N.W.
                                                                                                                                                                                                                                                                                                                        APPLICANT: BURGER, Alexander
HALLEK, Michael
TITLE OF INVENTION: PAPILLOMA VIRUS CAPSOMERE VACCINE
FORMULATIONS AND METHODS OF USE
                                                                                                                                                                                                                                                                                                       NUMBER OF SEQUENCES: 28
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1 Similarity 96.9%;
95; Conservative
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                                                                                                                                                                                                   CITY: Washington
STATE: D.C.
                                                                                                                                                                                  COUNTRY: U.S.A.
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Pred. No. 8e-60;
0; Mismatches
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US-09-986-118A-4
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GENERAL INFORMATION:
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                                   TELEPHONE: (202) 67
TELEFAX: (202) 672-
INFORMATION FOR SEQ ID NO: 4:
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SEQUENCE CHARACTERISTICS:
                                                                                                                                                              COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION NUMBER: US/09/986,118A
FILING DATE: 07-No. 6562351-2001
CLASSIFICATION EXAMPLE: COLOR CLASSIFICATION DATA:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 09/026,896
FILING DATE: <UNKNOWN>
APPLICATION NUMBER: US 09/026,896
FILING DATE: SANDERICOK, COLIN G.
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                                                                                            NAME: Sandercock, Colin G.
REGISTRATION NUMBER: 31,298
REFERENCE/DOCKET NUMBER: 37067/102
TELECOMMUNICATION INFORMATION:
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TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO:
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REGISTRATION NUMBER: 31,298
REFERENCE/DOCKET NUMBER: 37067/102
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202) 672-5300
TELEFAX: (202) 672-5399
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FILING DATE: 20-FEB-1998
ATTORNEY/AGENT INFORMATION:
                   SEQUENCE CHARACTERISTICS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITLE OF INVENTION: PAPILLOMA VIRUS CAPSOMERE VACCINE FORMULATIONS AND METHODS OF USE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: BURGER, Alexander HALLEK, Michael
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61 CDSTLRLCVQSTHVDIRTLEDLLMGTLGIVXPICSQKP 98
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CITY: Washington STATE: D.C.
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LENGTH: 98 amino acids
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                                                                                   (202) 672-5300
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Pred. No. 8e-60;
0; Mismatches
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RESULT 9
US-09-824-017-4
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Patent No. 6649167
GENERAL INFORMATION:
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LENGTH: 98
TYPE: PRT
ORGANISM: Papillomavirus sylvilagi
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Patent No. 6641994
GENERAL INFORMATION:
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APPLICANT: He, Wanxia
TITLE OF INVENTION: Methods to Identify Anti-Viral Agents
FILE REFERENCE: 28341/6216
CURRENT FILING DATE: 2000-12-01
PRIOR APPLICATION NUMBER: US/09/728,466
CURRENT FILING DATE: 2000-12-01
PRIOR APPLICATION NUMBER: 09/382,616
PRIOR FILING DATE: 1999-08-25
NUMBER OF SEQ ID NOS: 43
SOFTWARE: Patentin Ver. 2.0
COUNTRY: U.S.A.
COUNTRY: U.S.A.
COUNTRY: U.S.A.
ZIP: 20007-5109
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
MEDIUM TYPE: JBM PC compatible
TYPETEM: PC-DOS/MS-DOS
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es 95; Conserva
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                                                                                                                                                                                          CORRESPONDENCE ADDRESS:
ADDRESSEE: FOLEY & LARDNER
                                                                                                                                                                                                                                               TITLE OF INVENTION: PAPILLOMA VIRUS CAPSOMERE VACCINE FORMULATIONS AND METHODS OF USE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MOLECULE TYPE: protein SEQUENCE DESCRIPTION: SEQ ID
                                                                                                                                                                                                                              NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                 APPLICANT: BURGER, Alexander
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Pred. No. 8e-60;
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Pred. No. 8e-60;
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SOFTWARE: PatentIn version
SEQ ID NO 3
LENGTH: 98
                                                                                                                                                                                                  Matches
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Patent No. 6727079
                                                                                                                                                                                                                                                                Query Match
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                                                                                                                                                                                                                                 Best Local Similarity
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APPLICANT: Woltach, Joseph T.
APPLICANT: Description of the product of invention of the product of invention of the product of the produ
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SEQUENCE CHARACTERISTICS:
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APPLICATION UNMER: US/09/824,017
FILING DATE: 03-Apr-2001
CLASSIFICATION DATA:
APPLICATION UNMER: 09/026,896
FILING DATE: 198-02-20
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TELEPHONE: (202) 672-5300
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                                                                                                                            1 MHGDTPTLHEYMLDLQPETTDLYXXXQLNDSSEEEDEIDGPAGQAEPDRAHYNIVTFCCK 60
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95; Conserv
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CDSTLRLCVQSTHVDIRTLEDLLMGTLGIVXPICSQKP 98
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REGISTRATION NUMBER: 31,298
REFERENCE/DOCKET NUMBER: 37067/102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELEFAX: (202) 672-5399
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Pred. No. 8e-60;
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Pred. No. 8e-60;
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61

CDSTLRLCVQSTHVDIRTLEDLLMGTLGIVCPICSQKP 98

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APPLICANT: CHOPPIN, JEANNINE
APPLICANT: BOURGAULT VILLADA, ISABELLE
APPLICANT: GUILLET, JEAN-GERARD
APPLICANT: CONNAN, FRANCINE
APPLICANT: CONNAN, FRANCINE
APPLICANT: FERRIES, ESTELLE
TITILE OF INVENTION: PROTEINS OF HPV, THEIR PRODUCTION AND THEIR USE
TITLE OF INVENTION: PROTEINS OF HPV, THEIR PRODUCTION AND THEIR USE
TITLE OF INVENTION: PROTEINS OF HPV, THEIR PRODUCTION AND THEIR USE
TITLE OF INVENTION: PROTEINS OF HPV, THEIR PRODUCTION AND THEIR USE
TITLE OF INVENTION: PROTEINS OF HPV, THEIR PRODUCTION AND THEIR USE
TITLE OF INVENTION NUMBER: US/09/980,523A
CURRENT APPLICATION NUMBER: US/09/980,523A
CURRENT FILING DATE: 2002-04-29
PRIOR APPLICATION NUMBER: PCT/FR00/01513
PRIOR APPLICATION NUMBER: PCT/FR00/01513
PRIOR APPLICATION NUMBER: PCT/FR00/01513
PRIOR PILING DATE: 1999-06-03
NUMBER OF SEQ ID NOS: 24
CORTMAND: DETAILS US/09/980
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US-09-980-523A-12
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US-09-501-097A-7
                                                                                                                                                                                                                           US-09-980-523A-12
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LENGTH: 98
TYPE: PRT
ORGANISM: human papillomavirus
                                                                                                                                                                                                                                         SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 12
LENGTH: 98
TYPE: PRT
ORGANISM: Human Papillomavirus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 12, April
8 No. 6783763
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GENERAL INFORMATION:
APPLICANT: TZYY-CHOON WU
APPLICANT: Chien-Fu Hung
APPLICANT: Chien-Fu Hung
TITLE OF INVENTION: IMPROVED HSP DNA VACCINES
FILE REFERENCE: 2240-169349
CURRENT APPLICATION NUMBER: US/09/501,097A
CURRENT FILING DATE: 2000-02-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GENERAL INFORMATION:
                                                                                                                                       Matches
                                                                                                                                                            Query Match
Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
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SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                  Match 99.0%;
Local Similarity 96.9%;
tee 95; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local
    61
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Similarity
CDSTLRLCVQSTHVDIRTLEDLLMGTLGIVXPICSQKP 98
                                                                        MHGDTFTLHEYMLDLQPETTDLYXYXQLNDSSEEEDEIDGPAGQAEPDRAHYNIVTFCCK 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MHGDTPTLHEYMLDLQPETTDLYCYEQLNDSSEEEDEIDGPAGQAEPDRAHYNIVTFCCK 60
                                            MHGDTPTLHEYMLDLQPETTDLYCYEQLNDSSEEEDEIDGPAGQAEPDRAHYNIVTFCCK 60
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                                                                                                                             Score 512; DB 2; Length 98; Pred. No. 8e-60; O; Mismatches 3; Indels
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Pred. No. 8e-60;
0; Mismatches
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1 MHGDTPTLHEYMLDLQPETTDLYXYXQLNDSSEEEDEIDGPAGQAEPDRAHYNIVTFCCK 60

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Query Match
Best Local S
Matches 95
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                                                                                                                                                                              SOPTWARE: FastSEQ for Windows Version 4.0 SEQ ID NO 12
                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 12, Application US/10267311 Patent No. 6657055 GENERAL INFORMATION:
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Best Local Similarity 96.9%;
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Patent No. 6495347
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                              APPLICANT: Siegel, Marvin
APPLICANT: Chu, N. Randall
APPLICANT: Mizzen, Lee A.
TITLE OF INVENTION: INDUCTION OF A TH1-LIKE RESPONSE IN VITRO
FILE REFERENCE: 12071/002001
CURRENT APPLICATION NUMBER: US/10/267,311
CURRENT FILING DATE: 2002-10-09
PRIOR APPLICATION NUMBER: US/09/613,303
PRIOR PILING DATE: 2000-07-10
PRIOR APPLICATION NUMBER: US 60/143,757
PRIOR FILING DATE: 1999-07-08
NUMBER OF SEQ ID NOS: 55
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CURRENT APPLICATION NUMBER: US/09/613,303

CURRENT FILING DATE: 2000-07-10

PRIOR APPLICATION NUMBER: US 60/143,757

PRIOR FILING DATE: 1999-07-08

NUMBER OF SEQ ID NOS: 55
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APPLICANT: Chu, N. Randall
APPLICANT: Mizzen, Lee A.
TITLE OF INVENTION: INDUCTION OF A TH1-LIKE RESPONSE IN VITRO
                                                                                                          TYPE: PRT
ORGANISM: Artificial Sequence
                                                                                         OTHER INFORMATION: fusion sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ORGANISM: Artificial Sequence FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: PRT
                                                                                                                                                               LENGTH: 121
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   Similarity
95; Conserv
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99.0%;
larity 96.9%;
Conservative
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Score 512; DB 2; ]
Pred. No. 1.1e-59;
0; Mismatches 3;
                                   Length 121;
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WESULT 15
US-09-613-303-35
; Sequence 35, Application US/09613303
; Patent No. 6495347
; GENERAL INFORMATION:
; APPLICANT: Siegel, Marvin
APPLICANT: Chu, N. Randall
APPLICANT: Mizzen, Lee A.
; TILLE OF INVENTION: INDUCTION OF A TH1-LIKE RESPONSE IN VITRO
; FILE REFERENCE: 12071/002001
; CURRENT FILING DATE: 2000-07-10
; PRIOR APPLICATION NUMBER: US 60/143,757
; PRIOR FILING DATE: 1999-07-08
; NUMBER OF SEQ ID NOS: 55
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 35
; LENGTH: 198
; TYPE: PRT
ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: fusion sequence
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Search completed: June 6, 2006, 12:13:13 Job time: 29.7309 secs
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                                                                             61 CDSTLRLCVQSTHVDIRTLEDLLMGTLGIVXPICSQKP 98
                                                                                                                                                            101 MHGDTPTLHEYMLDLQPETTDLYCYEQLNDSSEEEDEIDGPAGQAEPDRAHYNIVTFCCK 160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         24 MHGDTPTLHEYMLDLQPETTDLYCYEQLNDSSEEEDEIDGPAGQAEPDRAHYNIVTFCCK 83
                                                                                                                                                                                   1 MHGDTPTLHEYMLDLQPETTDLYXYXQLNDSSEEEDEIDGPAGQAEPDRAHYNIVTFCCK 60
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Result
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Maximum Match 100%
Listing first 45 summaries
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Perfect score:
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1: /EMC_Celerra_SIDS3/ptodata/2/pubpaa/US07_PUBCOMB.pep:*

2: /EMC_Celerra_SIDS3/ptodata/2/pubpaa/US08_PUBCOMB.pep:*

3: /EMC_Celerra_SIDS3/ptodata/2/pubpaa/US09_PUBCOMB.pep:*

4: /EMC_Celerra_SIDS3/ptodata/2/pubpaa/US10A_PUBCOMB.pep:*

5: /EMC_Celerra_SIDS3/ptodata/2/pubpaa/US110B_PUBCOMB.pep:*

6: /EMC_Celerra_SIDS3/ptodata/2/pubpaa/US11_PUBCOMB.pep:*
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517
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Match Length
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Gapop 10.0 ,
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  MHGDTPTLHEYMLDLQPETT.....LEDLLMGTLGIVxPICSQKP 98
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Copyright (c) 1993 - 2006
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                                       US-10-530-253-11
US-10-009-903-8
US-10-309-771-8
US-10-367-995-9
US-10-367-367-9
US-10-367-367-9
US-10-918-337-9
US-10-918-337-9
US-09-928-466-1
US-09-928-466-1
US-09-926-118A-4
US-09-986-118A-4
US-10-177-390-8
US-10-177-390-8
US-10-479-541-5
US-10-654-129-4
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              Sequence 11, Appli
Sequence 8, Appli
Sequence 9, Appli
Sequence 9, Appli
Sequence 9, Appli
Sequence 9, Appli
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Sequence 17, Appli
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              Sequence 8, Application US/10000903
Publication No. US20020182221A1
GENERAL INFORMATION:
APPLICANT: Bruck, Claudine
APPLICANT: Cabezon Silva, Teresa
APPLICANT: Cabezon Silva, Teresa
APPLICANT: Delisse, Anne-Marie Eva Fernande
APPLICANT: Gerard, Catherine Marie Ghislaine
APPLICANT: Lombardo-Bencheikh, Angela
TITLE OF INVENTION: Vaccine
                                                                                                                                                                                                                     RESULT 2
US-10-000-903-8
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; ORGANISM: Human
US-10-530-253-11
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US-10-530-253-11
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
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REFERENCE: B45107
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4 US-10-000-903 5 US-10-000-903 5 US-10-10-530-253 6 US-11-192-923 6 US-11-192-923 6 US-11-192-923 6 US-11-679-956 4 US-10-679-956 4 US-10-472-7311 5 US-10-472-7311 5 US-10-899-771 6 US-10-899-771 7 US-10-899-771 7 US-10-899-771 7 US-10-899-771	45	44	43	42	41	40	39	38	37	36	35	34	ω G	32	31	30	29
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220 5 US-10-903-1 220 5 US-10-899-771-1 239 4 US-10-899-771-12 249 5 US-10-899-771-12 248 5 US-10-899-771-12 248 6 US-11-192-923A-2 266 3 US-09-367-309A-1 295 4 US-10-267-311-3 295 5 US-10-679-956-25 314 4 US-10-679-956-25 334 4 US-10-679-956-25 334 5 US-10-679-956-25 334 6 US-10-679-956-25 334 7 US-10-899-771-6 371 8 US-10-899-771-6 390 5 US-10-899-771-14 390 5 US-10-899-771-14	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0
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ALIGNMENTS

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Sequence 11, Application US/10530253

Publication No. US20060014926A1

GENERAL INFORMATION:
APPLICANT: Cassetti, Maria C.
APPLICANT: Smith, Larry
APPLICANT: Susan p. McElhiney
ITILE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
FILE REFERENCE: 00630/100M137-US2
CURRENT APPLICATION NUMBER: US/10/530, 253
CURRENT FILING DATE: 2005-04-04
PRIOR APPLICATION NUMBER: PCT/US2003/031726
PRIOR FILING DATE: 2003-10-02
PRIOR FILING DATE: 2003-10-03
NUMBER OF SEQ ID NOS: 65
SOFTWARE: Patentin version 3.1
SEQ ID NO 11
LENGTH: 248
                                                                                                       1 MHGDTPTLHEYMLDLQPETTDLYXYXQLNDSSEEEDEIDGPAGQAEPDRAHYNIVTFCCK
                                                                                1 MHGDTPTLHEYMLDLQPETTDLYGYGQLNDSSEEEDEIDGPAGQAEPDRAHYNIVTFCCK
                                                                                                                                                                    Similarity
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CDSTLRLCVQSTHVDIRTLEDLLMGTLGIVGPICSQKP
                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                   papillomavirus type
                                                                                                                                                                              99.4%;
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                                                                                                                                                           Score 514; DB 5; L
Pred. No. 3.3e-53;
                                                                                                                                                                                                      Length 248;
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CURRENT APPLICATION NUMBER: US/10/899,771
CURRENT FILING DATE: 2004-07-27
PRIOR APPLICATION NUMBER: US/09/581,976
PRIOR FILING DATE: 2000-06-20
PRIOR PILING DATE: 1090-06-20
PRIOR FILING DATE: 1998-12-18
PRIOR PILING DATE: 1998-12-18
PRIOR FILING DATE: 1997-12-24
NUMBER OF SEQ ID NOS: 28
SOFTWARE: FASTSEQ for Windows Version 3.0
SEQ ID NO 8
LENGTH: 220
TYPE: PRT
ORGANISW: Artificial Sequence
FEATURE:
COLLED THEORY.
RESULT 4
US-10-530-253-9
; Sequence 9, Application US/10530253
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US-10-899-771-8
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US-10-899-771-8
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; TYPE: PRT
; ORGANISM: Homo sapien
US-10-000-903-8
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PRIOR FILING DATE: 1997-08-22
NUMBER OF SEQ ID NOS: 23
SOFTWARE: FASTSEQ for Windows Version 3.0
SEQ ID NO 8
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Publication No. US20050031638A1
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Best Local Similarity
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APPLICANT: Gerard, Catherine Marie Ghislaine
TITLE OF INVENTION: Compositions Comprising Human Papilloma Virus Proteins
TITLE OF INVENTION: and Fusion Proteins Adjuvanted with a CpG Oligonucleo
FILE REFERENCE: B45124
FILE REFERENCE: B45124
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CURRENT FILING DATE: 2001-10-01
PRIOR APPLICATION NUMBER: PCT/EP98/05285
PRIOR FILING DATE: 1998-08-17
                                                                                                                                                                                                                                                                                                                       Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             61 CDSTLRLCVQSTHVDIRTLEDLLMGTLGIVXPICSQKP
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                                                                                                                                                                 CDSTLRLCVQSTHVDIRTLEDLLMGTLGIVXPICSQKP 98
                                                                                                                                                                                                            MHGDTPTLHEYMLDLQPETTDLYGYQQLNDSSEEEDEIDGPAGQAEPDRAHYNIVTFCCK 173
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96.9%; Pred. No. 3.8e-53;
tive 0; Mismatches 3
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Pred. No. 3.8e-53;
0; Mismatches 3
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Human papilloma
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CURRENT FILING DATE: 2003-02-14
PRIOR APPLICATION NUMBER: US 60/356,119
PRIOR FILING DATE: 2002-02-14
PRIOR APPLICATION NUMBER: US 60/356,161
PRIOR APPLICATION NUMBER: US 60/356,161
PRIOR APPLICATION NUMBER: US 60/356,118
PRIOR PILING DATE: 2002-02-14
PRIOR APPLICATION NUMBER: US 60/356,133
PRIOR PILING DATE: 2002-02-14
PRIOR PILING DATE: 2002-02-14
PRIOR PILING DATE: 2002-02-14
PRIOR APPLICATION NUMBER: US 60/356,157
PRIOR PILING DATE: 2002-02-14
PRIOR APPLICATION NUMBER: US 60/356,156
PRIOR PILING DATE: 2002-02-14
PRIOR PILING DATE: 2002-02-14
PRIOR PILING DATE: 2002-02-14
PRIOR PILING DATE: 2002-02-14
PRIOR APPLICATION NUMBER: US 60/356,123
PRIOR PILING DATE: 2002-02-14
PRIOR APPLICATION NUMBER: US 60/356,113
PRIOR APPLICATION NUMBER: US 60/356,113
PRIOR APPLICATION NUMBER: US 60/356,114
PRIOR APPLICATION NUMBER: US 60/356,1154
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US-10-367-095-9
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                                                                                      Remaining Prior Application data removed - NUMBER OF SEQ ID NOS: 13
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 9, Application US/10367095 Publication No. US20030228696A1 GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
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Best Local (
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL
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CURRENT APPLICATION NUMBER: US/10/367,095
CURRENT FILING DATE: 2003-02-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION NUMBER: PCT/US2003/031726
PRIOR FILING DATE: 2003-10-02
PRIOR APPLICATION NUMBER: US 60/415,929
PRIOR FILING DATE: 2002-10-03
NUMBER OF SEQ ID NOS: 65
SOFTWARE: Patentin version 3.1
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CURRENT APPLICATION NUMBER: US/10/530,253
CURRENT FILING DATE: 2005-04-04
                                                                                                                                                                                                        PRIOR APPLICATION NUMBER: US 60/356,135 PRIOR FILING DATE: 2002-02-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Robin A. Robinson TITLE OF INVENTION: No. US20030228696Alel Insect Cell Line
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Smith, Larry
APPLICANT: Jeffrey K. Pullen
APPLICANT: Susan P. McElhiney
TITLE OF INVENTION: HUMAN PAPILLOMAVIRUS POLYPEPTIDES AND IMMUNOGENIC COMPOSITIONS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Cassetti, Maria C. APPLICANT: Smith, Larry
TYPE: PRT ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM: Human papillomavirus type 16
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                                                               LENGTH:
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Pred. No. 4.4e-53;
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                                                                                                                                                                                                                                                             ; OTHER INFORMATION: HPV-16 L2/E7/E2 fusion protein US-10-368-046-9
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                                                                                                                                                                                                                                                                                                                                                                                         Remaining Prior Application data removed - NUMBER OF SEQ ID NOS: 13
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 9
                                                                                                                                                                        Matches
                                                                                                                                                                                            Query Match
Best Local (
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Best Local Similarity
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PRIOR FILING DATE: 2002-02-14
PRIOR APPLICATION NUMBER: US 60/356,161
PRIOR FILING DATE: 2002-02-14
PRIOR APPLICATION NUMBER: US 60/356,118
PRIOR FILING DATE: 2002-02-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE OF INVENTION: Method for Isolation and Purification TITLE OF INVENTION: Expressed Gene Products In Vitro FILE REFERENCE: 44149-3US1 CURRENT APPLICATION NUMBER: US/10/368,046 CURRENT FILING DATE: 2003-02-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Robin A. Robinson APPLICANT: Vittoria Cioce
                                                                                                                                                                                                                                                                                                   TYPE: PRT
ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                  ENGTH: 805
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: US 60/356,154 FILING DATE: 2002-02-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: US 60/356,133
FILING DATE: 2002-02-14
APPLICATION NUMBER: US 60/356,157
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                                                                                   471 MHGDTPTLHEYMLDLQPETTDLYGYEQLNDSSEEEDEIDGPAGQAEPDRAHYNIVTFCCK
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                                                                                                                           1 MHGDTPTLHEYMLDLQPETTDLYXYXQLNDSSEEEDEIDGPAGQAEPDRAHYNIVTFCCK 60
                                                                                                                                                                                            Similarity
CDSTLRLCVQSTHVDIRTLEDLLMGTLGIVCPICSQKP 568
                             CDSTLRLCVQSTHVDIRTLEDLLMGTLGIVXPICSQKP 98
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                                                                                                                                                                        Conservative
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                                                                                                                                                                   99.2%; Score 513; DB 4;
96.9%; Pred. No. 1.9e-52;
tive 0; Mismatches 3
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RESULT 7

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CURRENT APPLICATION NUMBER: US/10/918,337
CURRENT FILING DATE: 2004-08-13
PRIOR APPLICATION NUMBER: PCT/US03/04473
PRIOR APPLICATION NUMBER: US 60/356,119
PRIOR APPLICATION NUMBER: US 60/356,161
PRIOR APPLICATION NUMBER: US 60/356,161
PRIOR APPLICATION NUMBER: US 60/356,161
PRIOR FILING DATE: 2002-02-14
PRIOR FILING DATE: 2002-02-14
PRIOR PILING DATE: 2002-02-14
PRIOR PILING DATE: 2002-02-14
PRIOR APPLICATION NUMBER: US 60/356,133
PRIOR FILING DATE: 2002-02-14
PRIOR APPLICATION NUMBER: US 60/356,133
PRIOR PILING DATE: 2002-02-14
PRIOR APPLICATION NUMBER: US 60/356,157
PRIOR APPLICATION NUMBER: US 60/356,157
PRIOR APPLICATION NUMBER: US 60/356,156
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; OTHER INFORMATION: HPV-16 L2/E7/E2 fusion protein US-10-367-367-9
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PRIOR FILING DATE: 2002-02-14
PRIOR PELICATION NUMBER: US 60/356,161
PRIOR PELICATION NUMBER: US 60/356,161
PRIOR PELICATION NUMBER: US 60/356,118
PRIOR PELICATION NUMBER: US 60/356,118
PRIOR PELICATION NUMBER: US 60/356,133
PRIOR PELICATION NUMBER: US 60/356,157
PRIOR APPLICATION NUMBER: US 60/356,157
PRIOR PELICATION NUMBER: US 60/356,157
PRIOR PELICATION NUMBER: US 60/356,156
PRIOR APPLICATION NUMBER: US 60/356,156
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Publication No. US20040121465A1
GENERAL INFORMATION:
APPLICANT: Robin A. Robinson
TITLE OF INVENTION: Optimization of Gene Sequences of
TITLE OF INVENTION: Virus-Like Particles for Expression in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GENERAL INFORMATION:
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Publication No. US20050118191A1
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Best Local :
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TITLE OF INVENTION: Optimization of Gene Sequences of
TITLE OF INVENTION: Chimeric Virus-Like Particles for
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CURRENT APPLICATION NUMBER: US/10/367,367
CURRENT FILING DATE: 2003-02-15
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TYPE: PRT
ORGANISM: Artificial Sequence
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                              APPLICATION NUMBER: US 60/356,123 FILING DATE: 2002-02-14
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95; Conserv
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US 60/356,113
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PRIOR APPLICATION NUMBER: 09/382,616
PRIOR FILING DATE: 1999-08-25
NUMBER OF SEQ ID NOS: 43
SOFTWARE: PATENTIN Ver. 2.0
SEQ ID NO 1
LENGTH: 98
TYPE: PRT
ORGANISM: Papillomavirus sylvilagi
US-09-728-466-1
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US-09-820-765-4
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                                                                                                                                        Sequence 4, Application US/09820765
Publication No. US20020039584A1
GENERAL INFORMATION:
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Best Local Similarity 96.9%;
Matches 95; Conservative
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APPLICANT: He, Wanxia
TITLE OF INVENTION: Methods to Identify Anti-Viral Agents
FILE REFERENCE: 28341/6216
CURRENT APPLICATION NUMBER: US/09/728,466
CURRENT FILING DATE: 2000-12-01
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PRIOR APPLICATION NUMBER: US 60/356,154
PRIOR FILING DATE: 2002-02-14
Remaining Prior Application data removed -
NUMBER OF SEQ ID NOS: 13
SOFTWARE: FastSEQ for Windows Version 4.0
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TYPE: PRT
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                                      NUMBER OF SEQUENCES: 28
                                                                                                    APPLICANT: BURGER, Alexander HALLEK, Michael
                     CORRESPONDENCE ADDRESS
                                                                          TITLE OF INVENTION: PAPILLOMA VIRUS CAPSOMERE VACCINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         471 MHGDTPTLHEYMLDLQPETTDLYGYEQLNDSSEEEDEIDGPAGQAEPDRAHYNIVTFCCK 530
                                                                                                                                                                                                                                                                                      13
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ADDRESSEE: FOLEY & LARDNER
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                                                                                                  Michael
                                                         FORMULATIONS AND
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                                                         METHODS
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                                                         OF USE
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US-09-824-017-4
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEPHONE: (202) 672-5390
TELEPAX: (202) 672-5399
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 98 amino acids
            CITY: Washington
STATE: D.C.
COUNTRY: U.S.A.
ZIP: 2007-5109
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Ver
CURRENT APPLICATION UNMBER: US/09/824,017
FILING DATE: 03-App-2001
CLASSIFICATION: 424
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COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Verence Application Number: US/09/820,765

FILING DATE: 30-Mar-2001

CLASSIFICATION: Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local Similarity
                                                                                                                                                                                                                                                                                                                                         TITLE OF INVENTION: PAPILLOMA VIRUS CAPSOMERE VACCINE FORMULATIONS AND METHODS OF USE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: US 09/026,896
FILING DATE: 20-FEB-1998
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                     CORRESPONDENCE ADDRESS:
ADDRESSEE: FOLEY & LARDNER
STREET: 3000 K Street, N.W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 4:
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REGISTRATION NUMBER: 31,298
REFERENCE/DOCKET NUMBER: 37067/102
TELECOMMUNICATION INFORMATION:
PRIOR APPLICATION DATA
                                                                                                                                                                                                                                                                                                                                   NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: BURGER, Alexander
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          5
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CDSTLRLCVQSTHVDIRTLEDLLMGTLGIVCPICSQKP 98
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Pred. No. 1.8e-53;
                                                                                              Version #1.30
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TYPE: amino acids
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TOPOLOGY: linear
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MOLECULE TYPE: protein
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SEQUENCE DESCRIPTION: SEQ ID NO: 4:
US-09-824-017-4
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US-09-986-118A-4
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                                                         TELEPHONE: (202) 672-5300
TELEPAX: (202) 672-5399
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 98 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELEFAX: (202) 672-5
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                         COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/986, 118A
FILING DATE: 07-No. US20030021806A1-2001
CLASSIFICATION: cUnknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 09/026,896
FILING DATE: cUnknown>
APPLICATION NUMBER: US 09/026,896
FILING DATE: cUnknown>
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MEDIUM TYPE: Floppy disk
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REFERENCE/DOCKET NUMBER: 37067/102
TELECOMMUNICATION INFORMATION:
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FILING DATE: 1998-02-20
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE OF INVENTION: PAPILLOMA VIRUS CAPSOMERE VACCINE FORMULATIONS AND METHODS OF USE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: BURGER, Alexander HALLEK, Michael
TOPOLOGY: linear MOLECULE TYPE: protein
                                                                                                                                                              TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CORRESPONDENCE ADDRESS:
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                                                                                                                                                                               NAME: Sandercock, Colin G.
REGISTRATION NUMBER: 31,298
REFERENCE/DOCKET NUMBER: 37067/102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MHGDTPTLHEYMLDLQPETTDLYCYEQLNDSSEEEDEIDGPAGQAEPDRAHYNIVTFCCK
                                        TYPE: amino acid
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Pred. No. 1.8e-53;
0; Mismatches 3
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US-10-654-129-4
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US-10-177-390-8
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CURRENT APPLICATION NUMBER: US/10/177,390
CURRENT FILING DATE: 2002-06-20
NUMBER OF SEQ ID NOS: 34
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 8
LENGTH: 98
                                                                                                                                                                                                                                                                                                                            Sequence 4, Application US/10654129
Publication No. US20040081661A1
GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Best Local Similarity Matches 95; Conserv
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APPLICANT: N.V. Antwerps Innovatiecentrum
TITLE OF INVENTION: Improved Transfection of Eucaryotic Cells with Linear
TITLE OF INVENTION: Polynucleotides by Electroporation
FILE REFERENCE: 021555wo/JH/ml
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM: Artificial Sequence FEATURE:
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ZIP: 20007-5109
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                  NUMBER OF SEQUENCES: 28
CORRESPONDENCE ADDRESS:
ADDRESSEE: FOLEY & LARDNER
                                                                                                                                                                                                                                              TITLE OF INVENTION: PAPILLOMA VIRUS CAPSOMERE VACCINE FORMULATIONS AND METHODS OF USE
                                                                                                                                                                                                                                                                                      APPLICANT: BURGER, Alexander HALLEK, Michael
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                                                                                                                    CITY: Washington STATE: D.C.
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                                                                                                                                                               STREET: 3000 K Street, N.W.
                                                                                                      COUNTRY: U.S.A.
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llarity 96.9%;
Conservative
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Pred. No. 1.8e-53;
0; Mismatches 3
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Sequence 3, Application US/10772988

Sequence 3, Application No. US20040139485A1

GENERAL INFORMATION:

APPLICANT: Thorgeirson, Snorri S.

APPLICANT: Thorgeirson, Snorri S.

APPLICANT: Zhang, Minghuang

TITLE OF INVENTION: CDNA ENCODING A GENE BOG (B5T OVER-EXPRESSED GENE) AND ITS PROTEI

TITLE OF INVENTION: PRODUCT

FILE REFERENCE: 11613.29USW1

CURRENT APPLICATION NUMBER: US/09/637,746

PRIOR APPLICATION NUMBER: US/09/637,746

PRIOR APPLICATION NUMBER: US/09/637,746

PRIOR FILING DATE: 1999-02-05

PRIOR APPLICATION NUMBER: US/09/637,746

PRIOR APPLICATION NUMBER: US/09/637,746

PRIOR FILING DATE: 1999-02-25

PRIOR FILING DATE: 1999-02-25

PRIOR APPLICATION NUMBER: US/00/05,922

PRIOR APPLICATION NUMBER: US/00/05,922

PRIOR APPLICATION NUMBER: US/00/05,922

PRIOR APPLICATION NUMBER: US/00/05,922

PRIOR FILING DATE: 1998-03-27

PRIOR PRIOR PRIOR DATE: 1998-03-27

PRIOR FILING DATE: 1998-03-27

PRIOR PRIOR PRIOR DATE: 1998-03-27

PRIOR DATE: 199
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US-10-772-988-3
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                                                                                                        Query Match
Best Local Similarity
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Best Local Similarity 96.9%;
Matches 95; Conservative
                                                                      Matches
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SEQUENCE CHARACTERISTICS:
LENGTH: 98 amino acids
TYPE: amino acid
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CURRENT APPLICATION NOMBER: US/10/654,129
PILING DATE: 04-8sp-2003
CLASSIFICATION: 424
PRIOR APPLICATION OBTA:
APPLICATION NUMBER: US/09/824,017
PILING DATE: 03-8pr-2001
APPLICATION NUMBER: 09/026,896
FILING DATE: 1938-02-20
ATTORNEY/AGENT INFORMATION:
NAME: Sandercock, Colin G.
REGISTRATION NUMBER: 31,298
REFERENCE/DOCKET NUMBER: 37067/102
TELECOMMUNICATION INFORMATION:
TRILEDHOME: (2007) 472-4700
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MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 4:
                                                                          95; Conservative
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1 MHGDTPTLHEYMLDLQPETTDLYXYXQLNDSSEEEDEIDGPAGQAEPDRAHYNIVTFCCK 60
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                                                                                                    96.9%;
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                                                                   Score 512; DB 4; Length 98; Pred. No. 1.8e-53; O; Mismatches 3; Indels
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Search completed: June 6, 2006, 12:32:59 Job time: 107.659 secs

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Minimum
Maximum
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Maximum Match 100%
Listing first 45 summaries
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Perfect score:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Published_Applications_AA_New:*

1. /EMC_Celerra_SIDS3/ptodata/2/pubpaa/US09_NEW_PUB.pep:*

2. /EMC_Celerra_SIDS3/ptodata/2/pubpaa/US06_NEW_PUB.pep:*

3. /EMC_Celerra_SIDS3/ptodata/2/pubpaa/US07_NEW_PUB.pep:*

4. /EMC_Celerra_SIDS3/ptodata/2/pubpaa/US08_NEW_PUB.pep:*

5. /EMC_Celerra_SIDS3/ptodata/2/pubpaa/US10_NEW_PUB.pep:*

6. /EMC_Celerra_SIDS3/ptodata/2/pubpaa/US10_NEW_PUB.pep:*

7. /EMC_Celerra_SIDS3/ptodata/2/pubpaa/US11_NEW_PUB.pep:*

8. /EMC_Celerra_SIDS3/ptodata/2/pubpaa/US00_NEW_PUB.pep:*
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Copyright (c) 1993 - 2006 Biocceleration Ltd.
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US-10-511-814-11
5 US-10-512-190-2
7 US-11-209-206-6
7 US-11-209-206-7
7 US-11-209-679-3473
8 US-10-505-928-341
9 US-10-953-349-39530
9 US-10-953-349-39530
9 US-10-953-349-39530
9 US-10-953-349-37424
9 US-10-953-349-37424
9 US-10-953-349-37424
9 US-10-953-349-3783
9 US-10-953-349-349-3493
9 US-10-953-349-349-3495
9 US-10-953-349-2346
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Sequence 8, Appli
Sequence 11, Appli
Sequence 2, Appli
Sequence 4, Appli
Sequence 2678, Appli
Sequence 3473, App
Sequence 3951, A
Sequence 39519, A
Sequence 27425, A
Sequence 27426, A
Sequence 3781, App
Sequence 23, Appli
Sequence 23, Appli
Sequence 23406, A
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Sequence	Sequence	Sequence	Sequence	Sequence	Seguence	Sequence		equence	Φ	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence
23351, A	31198, A	35807, A	35808, A		1526, Ap	•	20548, A	20549, A	300, App			213, App			174, App		177, App		5450, Ap

ALIGNMENTS

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RESULT 2
US-10-511-814-11
; Sequence 11, Application US/10511814
; Publication No. US20060088472A1
; GENERAL INFORMATION:
; APPLICANT: McCance, Dennis
; APPLICANT: Mestbrook, III, Thomas F.
; TITLE OF INVENTION: E7 REGULATION OF P2:
; FILE REFERENCE: 21108.0016U2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: McCance, Dennis

APPLICANT: McCance, Dennis

TITLE OF INVENTION: ET REGULATION OF P21 (CIP1) THROUGH AKT

FILE REFERENCE: 21108.0016U2

CURRENT APPLICATION NUMBER: US/10/511,814

CURRENT FILING DATE: 2004-10-19

PRIOR APPLICATION NUMBER: PCT/US03/12667

PRIOR APPLICATION NUMBER: PCT/US03/12667

PRIOR APPLICATION NUMBER: 60/374,245

PRIOR APPLICATION NUMBER: 60/
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US-10-511-814-8
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Best Local Similarity
Matches 95; Conserv
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Publication No. US20060088472A1
GENERAL INFORMATION:
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ilarity 96.9%;
Conservative (
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; Pred. No. 2.4e:
0; Mismatches
                                                      P21
                                                      (CIP1) THROUGH
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CURRENT APPLICATION NUMBER: US/10/511,814
CURRENT FILING DATE: 2004-10-19
PRIOR APPLICATION NUMBER: PCT/US03/12667
PRIOR FILING DATE: 2003-04-21
PRIOR APPLICATION NUMBER: 60/374,245
PRIOR FILING DATE: 2002-04-19
NUMBER OF SEQ ID NOS: 21
SOFTWARE: FASTSEQ for Windows Version 4.0
SEQ ID NO 11
LENGTH: 98
TYPE: PRT
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US-10-512-190-2
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SOFTWARE: Patentin version 3.3
SEQ ID NO 2
LENGTH: 92
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Best Local
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APPLICANT: Bollen, Alex
TITLE OF INVENTION: MUTATED HPV-16 E7 POLYPEPTIDE, PHARMACEUTICAL COMPOSITION
TITLE OF INVENTION: COMPRISING IT AND ITS PREPARATION PROCESS
TILE REFERENCE: 9997.50USWO
CURRENT APPLICATION NUMBER: US/10/512,190
CURRENT FILING DATE: 2004-10-22
PRIOR APPLICATION NUMBER: PCT/BE03/000073
PRIOR FILING DATE: 2003-04-24
PRIOR APPLICATION NUMBER: WS 60/410,461
PRIOR FILING DATE: 2002-09-13
PRIOR FILING DATE: 2002-09-13
PRIOR FILING DATE: 2002-04-24
PRIOR APPLICATION NUMBER: FR 0304170
PRIOR FILING DATE: 2003-04-03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 2, Application US/10512190 Publication No. US20060099219A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                               OTHER INFORMATION: Mutated (recombinant) HPV-16 E7-10-512-190-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Hallez, Sophie APPLICANT: Burny, Arsene
                                                                                                                                                                                                                                                                                    LENGTH: 92
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
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                         CDSTLRLCVQSTHVDIRTLEDLLMGTLGIVXPICSQKP
                                                                              MHGDTPTLHEYMLDLQPETT-----QLNDSSEEEDEIDGPAGQAEPDRAHYNIVTFCCK 54
                                                                                                        MHGDTPTLHEYMLDLQPETTDLYXXXQLNDSSEEEDEIDGPAGQAEPDRAHYNIVTFCCK 60
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    CDSTLRLCVQSTHVDIRTLEDLLMGTLGIVCPICSQKP
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                                                                                                                                                                 Conservative
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                                                                                                                                                                                  92.5%;
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                                                                                                                                                             Score 478; DB 6;
Pred. No. 1.3e-46;
0; Mismatches 1
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APPLICANT: Impact Diagnostics
TITIE OF INVENTION: Peptides from the E2, E6 and
TITIE OF INVENTION: 18 for Detecting and/or Dia
TITIE OF INVENTION: Associated Cancers
FILE REFERENCE: 3352-2-2
CURRENT APPLICATION NUMBER: US/11/209,206
CURRENT FILING DATE: 2005-08-22
PRIOR APPLICATION NUMBER: US 60/394,172
PRIOR APPLICATION NUMBER: US 60/394,172
PRIOR APPLICATION NUMBER: US 09/828,645
PRIOR APPLICATION NUMBER: US 09/828,645
PRIOR FILING DATE: 2002-07-05
PRIOR FILING DATE: 2001-04-05
NUMBER OF SEQ ID NOS: 8
SOFTWARE: Patentin version 3.1
SEQ ID NO 7
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US-11-209-206-7
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PRIOR APPLICATION NUMBER: US/11/209,206
PRIOR APPLICATION NUMBER: US 60/394,172
PRIOR FILING DATE: 2002-07-02
PRIOR APPLICATION NUMBER: US 09/828,645
PRIOR APPLICATION NUMBER: US 09/828,645
PRIOR FILING DATE: 2001-04-05
NUMBER OF SEQ ID NOS: 8
SOFTWARE: Patentin version 3.1
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LENGTH: 21
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Publication No. US20060110794A1
GENERAL INFORMATION:
APPLICANT: Impact Diagnostics
APPLICANT: Impact Diagnostics
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Best Local Similarity
Matches 20; Conserv
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TITLE OF INVENTION: Peptides from the E2, E6 and E7 Proteins of Human Papillomaviruses
TITLE OF INVENTION: 18 for Detecting and/or Diagnosing Cervical and Other Human Papil
TITLE OF INVENTION: Associated Cancers
FILE REFERENCE: 3352-2-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Impact Diagnostics
APPLICANT: Impact Diagnostics
                                                                                                                                                                                                                       TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
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TYPE: PRT
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                                                                                                                                                                                                                                                                                             LENGTH: 21
                                                                                                                Local
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                                                                                      l Similarity
18; Conserv
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                                          ETTDLYXXXQLNDSSEEEDEID 39
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llarity 81.8%;
Conservative
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                                                                                      Score 80.5; I
Pred. No. 0.00
0; Mismatches
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Pred. No. 1.3e-05;
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                                                                                                                                DB 7;
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Diagnosing
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gnosing Cervical and Other Human Papil
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RESULT 8
US-11-293-697-4473
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US-10-505-928-341
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Publication No. US20060105376A1
GENERAL INFORMATION:
APPLICANT: HELIX RESEARCH INSTITUTE
TITLE OF INVENTION: NOVel full length cDNA
FILE REFERENCE: H1-A0106
CURRENT APPLICATION NUMBER: US/11/293,697
CURRENT FILLING DATE: 2005-12-05
                 Sequence 4473, Application US/11293697 Publication No. US20060105376A1 GENERAL INFORMATION:
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PRIOR FILING DATE: 2002-03-28
NUMBER OF SEQ ID NOS: 5458
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 2678
LENGTH: 148
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CURRENT FILLING DATE: 2004-08-27
PRIOR APPLICATION NUMBER: US 60/363,019
PRIOR FILING DATE: 2002-03-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Ludwig Institute for Cancer Research et al. TITLE OF INVENTION: LYMPHATIC ENDOTHELIAL GENES FILE REFERENCE: 28967/39178
APPLICANT: HELIX RESEARCH INSTITUTE
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                                                                                                                                                                                                                                                                                                                                                                                TYPE: PRT
ORGANISM: Homo sapiens
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Local Similarity 23.8%;
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1 Similarity 30.6%;
19; Conservative
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                                                                                                                                                                                STLRLCVQSTHVDIRTLEDL 82
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Pred. No. 45
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RESULT 10
US-10-953-349-39520
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; TYPE: PRT
; ORGANISM: Homo sapiens
US-11-293-697-4473
                                   Sequence 39520, Application US/10953349
Publication No. US20060107345A1
GENERAL INFORMATION:
APPLICANT: ALEXANDROV, Nickolai et al.
TITLE OF INVENTION: SEQUENCE-DETERMINED DNA
TITLE OF INVENTION: ENCONDED THERBY
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SOFTWARE: PatentIn version 3.3
SEQ ID NO 39521
LENGTH: 462
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TITLE OF INVENTION: SEQUENCE-DETERMINED DY
TITLE OF INVENTION: ENCONDED THERBY
FILE REFERENCE: 2750-1579PUS2
CURRENT APPLICATION NUMBER: US/10/953,349
CURRENT FILING DATE: 2004-09-30
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CURRENT FILING DATE: 2005-12-05
PRIOR APPLICATION NUMBER: US/10/108,260
PRIOR FILING DATE: 2002-03-28
NUMBER OF SEQ ID NOS: 5458
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                   11.3%; Score 58.5; Local Similarity 23.1%; Pred. No. 24; les 24; Conservative 15. Winner 15.
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Local Similarity 22.7%; Pred. No.
128 29; Conservative 17. ...
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NUMBER: US/10/953,349
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17;
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                                                               FRAGMENTS
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                                                               AND CORRESPONDING POLYPEPTIDES
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Sequence 27426, Application Us/10953349
Publication No. US20060107345A1
GENERAL INFORMATION:
APPLICANT: ALEXANDROV, Nickolai et al.
TITLE OF INVENTION: SEQUENCE-DETERMINED DNA FRUITILE OF INVENTION: ENCONDED THERBY
FILE REFERENCE: 2750-1579PUS2
CURRENT APPLICATION NUMBER: US/10/953,349
CURRENT FILING DATE: 2004-09-30
; ORGANISM: Triticum aestivum US-10-953-349-27426
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US-10-953-349-39519
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US-10-953-349-27426
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                                 NUMBER OF SEQ ID NOS: 40252
SOFTWARE: PatentIn version 3.3
SEQ ID NO 27426
LENGTH: 233
TYPE: PRT
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TITLE OF INVENTION: SEQUENCE-DETERMINED DNA FRAGMENTS AND CORRESPONDING POLYPEPTIDES
TITLE OF INVENTION: ENCONDED THERBY
FILE REFERENCE: 2750-1579PUS2
CURRENT APPLICATION NUMBER: US/10/953,349
CURRENT FILING DATE: 2004-09-30
NUMBER OF SEQ ID NOS: 40252
SOFTWARE: PatentIn version 3.3
SEQ ID NO 39519
LENGTH: 646
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Publication No. US20060107345A1
GENERAL INFORMATION:
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NUMBER OF SEQ ID NOS: 40252
SOFTWARE: PatentIn version 3.3
SEQ ID NO 39520
LENGTH: 616
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Best Local :
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           h 11.3%; Score 58.5;
Similarity 23.1%; Pred. No. 35;
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Pred. No. 33;
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APPLICANT: ALEXANDROV, Nickolai et al.
TITLE OF INVENTION: SEQUENCE-DETERMINED DNA
TITLE OF INVENTION: ENCONDED THERBY
FILE REFERENCE: 2750-1579PUS2
CURRENT APPLICATION NUMBER: US/10/953,349
CURRENT FILING DATE: 2004-09-30
NUMBER OF SEQ ID NOS: 40252
SOFTWARE: PATENTIN VERSION 3.3
SEQ ID NO 27424
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Best Local Similarity
Thes 16; Conserve
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US-10-953-349-39537
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US-10-953-349-27424
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US-10-953-349-27425
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US-10-953-349-27424
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Sequence 39537, Application US/10953349
Publication No. US20060107345A1
GENERAL INFORMATION:
APPLICANT: ALEXANDROV, Nickolai et al.
TITLE OF INVENTION: SEQUENCE DETERMINED
TITLE OF INVENTION: ENCONDED THERBY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: ALEXANDROV, Nickolai et al.
TITLE OF INVENTION: SEQUENCE-DETERMINED DNA FRAGMENTS /
TITLE OF INVENTION: SEQUENCE-DETERMINED DNA FRAGMENTS /
TITLE OF INVENTION: SEQUENCE-THERBY
FILE REFERENCE: 2750-1579PUS2
CURRENT FILLING DATE: 2004-09-30
CURRENT FILLING DATE: 2004-09-30
NUMBER OF SEQ ID NOS: 40252
SOFTWARE: Patentin version 3.3
SEQ ID NO 27425
LENGTH: 296
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 27424, Application US/10953349
Publication No. US20060107345A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 27425, Application US/10953349 Publication No. US20060107345A1
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16; Conservative
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Pred. No. 23;
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Pred. No. 1
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; FILE REFERENCE: 2750-1579PUS2
; CURRENT APPLICATION NUMBER: US/10/953,349
; CURRENT FILING DATE: 2004-09-30
; NUMBER OF SEQ ID NOS: 40252
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 39537
; LENGTH: 446
; TYPE: PRT
; ORGANISM: Zea mays subsp. mays
US-10-953-349-39537
Search completed: June 6, 2006, 12:33:22 Job time: 7.08434 secs
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Result
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Perfect score:
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148 28.6 93 2 336474 E7 protein - hum 149.5 27.2 104 2 S36545 E7 protein - hum 140.5 27.2 104 2 S36545 E7 protein - hum 122 23.6 93 2 S36591 E7 protein - hum 122 23.6 93 2 S36591 E7 protein - hum 120.5 23.3 102 2 S36492 E7 protein - hum 121.9 23.0 103 2 S36539 E7 protein - hum 122 25 102 2 S36492 E7 protein - hum 123 21.9 103 1 W7WL47 E7 protein - hum 124 21.7 103 1 W7WL5 105 20.3 103 1 W7WL8 105 20.3 103 1 W7WL8 107 20.3 103 1 W7WL8 108 20.3 103 1 W7WL8 109 20.3 103
93 2 \$36445 93 2 \$36545 93 1 WWL 93 2 \$36591 102 2 \$36492 102 2 \$36492 103 2 \$36492 103 2 \$36492 103 1 WWL47 103 1 WWL5 103 1 WWL5 103 1 WWL5 103 1 WWL5 94 1 WWLB5 95 2 \$19907 98 2 \$61399
2 S36545 2 S36545 1 W7WL 2 S36591 2 S36591 2 S36592 2 S36486 1 W7WL47 1 W7WL5 1 W7WL85 1 W7WL88 1 W7WL89 2 S169907 2 S19999
E7 protes E8 protes

ALIGNMENTS

R;Seedorf, K.; Krammer, G.; Durst, M.; Suhai, S.; Rowek Virology 145, 181-185, 1985
A;Title: Human papillomavirus type 16 DNA sequence.
A;Reference number: A22355; MUID:85246220; PMID:2990099
A;Accession: A03688

E7 protein - human papillomavirus type 16 C;Species: human papillomavirus type 16 C;Date: 28-May-1986 #sequence revision 28-May-1986 #text_change 09-Jul-2004 C;Accession: A03688; S12367; T10428

G.; Durst, M.; Suhai, S.; Rowekamp,

W7WLHS

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A;Molecule type: DNA
A;Molecule type: DNA
A;Residues: 1-98 <SEE>
A;Residues: 1-98 <SEE
A;Residues: UNIPROT:PO3129; UNIPARC:UPI000000034E; GB:K02718; NID:g333031; PIDN:
B;Barbosa, M.S.; Edmonds, C.; Fisher, C.; Schiller, J.T.; Lowy, D.R.; Vousden, K.H.
EMBO J. 9, 153-160, 1990
A;Title: The region of the HPV E7 oncoprotein homologous to adenovirus E1a and SV40 larg
A;Reference number: S12367; MUID:90107938; PMID:2153075
A;Accession: S12367
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A;Cross-references: UNIPARC:UPI000000034E
R;Kennedy, I.M.; Haddow, J.K.; Clements, J.B.
J. Virol. 65, 2093-2097, 1991
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C;Superfamily: papillomavirus E7 protein
C;Keywords: DNA binding; early protein; transcription regulation;
F;58-94/Region: zinc finger CCCC motif
                                                                                                                                                                                                                                                                                                                                                                                                                               A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: DNA
A;Residues: 1-98 <KEN>
A;Cross-references: UNIPARC:UPI00000034E; EMBL:K02
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A;Title: A negative element in the human poapillomavirus type 16 genome acts at the leve A;Reference number: Z17014; MUID:91162763; PMID:1848319
A;Accession: T10428
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                                                                                                                                                                                                                               Similarity
                             CDSTLRLCVQSTHVDIRTLEDLLMGTLGIVXPICSQKP 98
                                                                                               MHGDTPTLHEYMLDLQPETTDLYCYEQLNDSSEEEDEIDGPAGQAEPDRAHYNIVTFCCK
                                                                                                                                                                                                       Conservative
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Pred. No. 6.2e-50;
0; Mismatches 3
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RESULT 2

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R;Marich, J.E.; Pontsler, A.V.; Rice, S.M.; Virology 186, 770-776, 1992
A;Title: The phylogenetic relationship and A;Reference number: A40824; MUID:92124753; A;Accession: F40824
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A;Molecule type: DNA
A;Residues: 1-99 <DEL>
A;Cross-references: UNIPARC:UPI000000035E;
A;Experimental source: Strain 35H
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C;Date: 30-Jun-1992 #sequence_r
C;Accession: F40824; S36522
                     á
                                                                                                                                                                                                                                                                                                A,Cross-references: UNIPROT:P17387; UNIPARC:UPI000013840A; GB:J04353; NID:g333048; C;Comment: This protein may be involved in the oncogenic potential of this virus. C;Superfamily: papillomavirus E7 protein
                                                                                                                                                                                                                                                                                                                                                                                                                                             Virology 171, 306-311, 1989
A,Title: Nucleotide sequence of human papillomavirus type 31: a cervical neoplasia-assoc A,Reference number: A94398; MUID:89299478; PMID:2545036
A,Recession: B32444
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Virology 171, 3
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submitted to the EMBL Data Library, August 1993
A;Description: Primer-directed sequencing of human papillomavirus types
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C;Date: 31-Mar-1990 #sequence_revision 31-Mar-1990 #text_change 09-Jul-2004
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A;Accession: S36522
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Matches 69
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;Keywords: DNA binding; early protein; transcription regulation; zinc finger
;59-95/Region: zinc finger CCCC motif
                                                                                                                                                                                                                                                       Keywords: DNA binding; early protein; transcription regulation; 58-94/Region: zinc finger CCCC motif
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Accession: F40824; S36522
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Species: human papillomavirus type 35
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CDSTLRLCVQSTHVDIRTLEDLLMGTLGIVXPICSQK 97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 h, M.D.; DiSilvestre, D.; Temple, G.F.; Lorincz,
306-311, 1989
                                                                   MRGETPTLQDYVLDLQPEATDLHCYEQLPDSSDEEDVIDSPAGQAEPDTSNYNIVTFCCQ
                                                                                            MHGDTPTLHEYMLDLQPETTDLYXYXQLNDSSEEEEDEIDGPAGQAEPDRAHYNIVTFCCK 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       KCDSTLRLCVQSTHVDIRTLEDILMGTLGIVXPICSQK 97
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                                                                                                                                                                Conservative
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                                                                                                                                                                                   72.0%;
71.1%;
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73.5%; Pred. No. 2.2e-35;
tive 11; Mismatches 14
                                                                                                                                                             12;
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Pred. No. 2.5e
12; Mismatches
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.5e-34;
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A;Cross-references: UNIPROT:P36831; UNIPARC:UPI000013841C; EMBL:X74481; NID:g397038; PID:C;Superfamily: papillomavirus E7 protein
C;Keywords: DNA binding; early protein; transcription regulation
                                                                                                                                                                                                                                                                                                                                                          R;Delius, H.; Hofmann, B. submitted to the EMBL Data Library, August 1993 A;Description: Primer-directed sequencing of human A;Reference number: S36469 A;Accession: S36574
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A; Reference number: S19906
A; Accession: S23831
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J. Virol. 58, 991-995, 1986
A;Title: Genome organization and nucleotide sequence of A;Reference number: A93020; MUID:86200464; PMID:3009902
A;Accession: A03689
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A;Description: HPV type 33 in a tonsillar carcinoma generat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           B7 protein - human papillomavirus type 33 (;Species: human papillomavirus type 33 (;Species: human papillomavirus type 33 C;Date: 30-Jun-1987 #sequence revision 30-Jun-1987 #text_change 09-Jul-2004 C;Accession: A03689; S23831; S23827
                                                                                                                                                                                                                                                                                                                    A; Residues: 1-99 < DEL>
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A; Residues: 1-97 <SNI>
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A; Residues: 1-97 <COL>
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56; Conserv
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56; Conserv
                                   CKCDSTLRLCVQSTHVDIRTLEDLLMGTLGIVXPICSQ 96
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                                                                               MRGDKATIKDYILDLQPETTDLHCYEQLGDSSDEEDTDGVDRPDGQAEQATSNYYIVTYC
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                                                                                                                                                                    Conservative
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                                                                                                                                                                    17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ype 52
                                                                                                                                                                    Score 294; DB 2; I
Pred. No. 1.2e-25;
7; Mismatches 23;
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Pred. No. 9.4e-26;
6; Mismatches 25;
                                                                                                                                                                 Mismatches
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Virology 151, 124-130, 1986
A;Title: The nucleotide sequence and genome organization A;Reference number: A94338; MUID:86181601; PMID:3008427 A;Accession: A036500 A;Molecule type: DNA A;Residues: 1-98 <DAR>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A;Molecule type: DNA
A;Residues: 1-98 <XITs-
A;Residues: 1-98 <XITs-
A;Cross-references: UNIPROT:P26557; UNIPARC:UPI00000034BB; GB:D90400; NID:g222386;
C;Superfamily: papillomavirus E7 protein
C;Keywords: DNA binding; early protein; transcription regulation; zinc finger
F;59-95/Region: zinc finger CCCC motif
                  W7WL6
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C;Superfamily: binding; early protein; transcription regulation; zinc finger
C;Keywords: DNA binding; early protein; transcription regulation; zinc finger
F;58-94/Region: zinc finger CCCC motif
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     B7 protein - human papillomavirus type 11
C;Species: human papillomavirus type 11
C;Date: 13-Aug-1986 #sequence_revision 13-Aug-1986 #text_change
C;Accession: A03690
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A;Reference number: A36779; MUID:92024102; PMID:1656594
A;Accession: F36779
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          R;Kirii, Y.; Iwamoto, S.; Matsukura, Virology 185, 424-427, 1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              E7 protein - human papillomavirus type 58 C;Species: human papillomavirus type 58 A;Note: host Homo sapiens (man) C;Date: 31-Mar-1992 #sequence_revision 31-Mar-1992 #text_change 09-Jul-2004 C;Accession: F36779
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      C; Accession: A03690
R; Dartmann, K.; Schwarz,
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                                                                                                                                           RESULT 8
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Best Local (
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DNA sequence
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                                                                                                                                                                                                                                                                                                                                                        Similarity
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                                                                                                                                                                                                                                                                MHGRLVTLKDIVLDLQPPDPVGLHCYEQLEDSSEDEVDKVD--KQDAQPLTQHYQILTCC
                                                                                                                                                                                                                                                                                               WHGDTPTLHEYMLDLQ-PETTDLYXXXQLNDSSEEE-DEIDGPAGQAEPDRAHYNIVTFC
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1986
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                                                                                                                                                                                                                                                                                                                                                     47.4%;
 genome
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 organization of genital human
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Pred. No. 3.5e-1
4; Mismatches
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papillomavirus
                                                                       09-Jul-2004
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                                  R.; Wolfsperger,
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A;Molecule type: DNA
A;Residues: 1-113 <OST>
A;Residues: 1-113 <OST>
A;Cross-references: UNIPROT:P22161; UNIPARC:UPI000013842F; EMBL:M37717
C;Superfamily: papillomavirus E7 protein
C;Keywords: DNA binding; early protein; transcription regulation
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S36516
                                                                                                                                                                                                                R;Ostrow, R.S.; LaBresh, K.V.; Faras, A.J. Virology 181, 424-429, 1991
A;Title: Characterization of the complete RhPV 1 genomic A;Reference number: A38503; MUID:91135018; PMID:1847267 A;Accession: B38503
                                                                                                                                                                                                                                                                                                                         E7 protein - rhesus papillomavirus (type 1)
C;Species: rhesus papillomavirus
C;Date: 31-Dec-1991 #sequence_revision 31-Dec-1991 #text_change 09-Jul-2004
C;Accession: B38503
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A;Cross-references: UNIPROT:P36828; UNIPARC:UPI000013840D; EMBL:X74476; NID:g396989; PII C;Superfamily: papillomavirus E7 protein C;Keywords: DNA binding; early protein; transcription regulation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           R;Delius, H.; Hofmann, B.
submitted to the EMBL Data Library, August 1993
A;Description: Primer_directed sequencing of human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                E7 protein - human papillomavirus type 34
C;Species: human papillomavirus type 34
C;Date: 20-Feb-1995 #sequence_revision 20-Feb-1995
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                                                                                                                                                                                           A; Status: translation not
                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 10
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A; Residues: 1-97 < DEL>
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A;Molecule type: DNA
A;Residues: 1-98 <SCH>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A; Reference number: A90975; MUID: 84131949; PMID: 6321162
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Query Match
Best Local S
Matches 49
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th 42.3%; Score 218.5; DB 1 Similarity 43.8%; Pred. No. 3.7e-17; 49; Conservative 13; Mismatches 35
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48; Conserv
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52.5%;
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Pred. No. 1.1e
l8; Mismatches
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Pred. No. 5.9e-20;
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                                         DB 1;
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                                      Length 113;
  Indels
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RESULT 13
S36528
E7 proteir
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C;Species: human papillomavirus type 30
C;Date: 20-Feb-1995 #sequence_revision 20-Feb-1995
C;Accession: S36504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          R)Delius, H.; Hofmann, B.
R)Delius, H.; Hofmann, B.
submitted to the EMBL Data Library, August 1993
submitted to the EMBL Data Library, August 1993
                                                                                                                                                                                                                                                                                                                                                                          A;Residues: 1-105 <DEL>
A;Residues: 1-105 <DEL>
A;Cross-references: UNIPROT:P36826; UNIPARC:UPI0000138409; EMBL:X74474; NID:g396973; PID
C;Superfamily: papillomavirus E7 protein
C;Keywords: DNA binding; early protein; transcription regulation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   R;Delius, H.; Hofmann, B.
submitted to the EMBL Data Library, August 1993
A;Description: Primer-directed sequencing of hu
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A; Residues: 1-106 < DEL>
A; Residues: 1-106 < DEL>
A; Cross-references: UNIPROT: P21736; UNIPARC: UPI0000138416; EMBL: X74479; NID: g397022; PID
C; Superfamily: papillomavirus E7 protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          E7 protein - human papillomavirus type 45
C;Species: human papillomavirus type 45
C;Date: 20-Feb-1995 #sequence_revision 20-Feb-1995 #text_change 09-Jul-2004
C;Accession: S36562
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A; Accession: S36504
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Best Local (
       protein -
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                                                                                                                                                                                                                                                                                                        47;
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                                                                                                                                                                                                                                                                                                                             Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        h 41.2%; Score 213; DB 2;
Similarity 43.8%; Pred. No. 1.4e-16;
46; Conservative 15; Mismatches 32
       human papillomavirus
                                                                                                                                                                  IVTFCCKCDSTLRLCVQSTHVDIRTLEDLLMGTLGIVXPICSQK 97
                                                                                                                                                                                                            MHGKVTTIPEYILDLVPQTEIDLHCYEQLNSSEEEDEDEVDNLQKQPQQARQEEQHPCYL 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MHGDTPTLHEYMLDLQPET----TDLYXYXQLNDSSEEEDEIDG-----PAGQAEPDRA 50
                                                                                                                                                                                                                                                      MHGDTPTLHEYMLDLQPET-TDLYXXXQLNDSSEE-EDEIDG---PAGQAEPDRAH--YN 53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MHGDTPTLHEYMLDL----QPETTDLYXYXQLNDSSEEEDEIDGPAGQAEPDRAH-----
                                                                                                                       INTOCCRCASAVQLAVQSPTKELRALQQMLMGALELVCPLCATR 104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PEDGDCYRIVSDCYSCGKPLRLVVVSSHEELRVLEDLLMGTLDIVCPSCASR 112
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                                                                                                                                                                                                                                                                                                        Conservative
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                                                                                                                                                                                                                                                                                                   40.5%; Score 209.5; DB 2;
45.2%; Pred. No. 3.5e-16;
tive 17; Mismatches 33;
       type
         53
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                                                                                                                                                                                                                                                                                                        4.
A;Molecule type: DNA
A;Residues: 1-105 <SEE>
A;Cross-references: UNIPROT:P06788; UNIPARC:UPI0000000DB5; GB:X04773; NID:g60876; PIDN:C!
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E7 protein - human papillomavirus type 13.

C;Species: human papillomavirus type 13.
A;Note: host Homo sapiens (man)
C;Date: 30.-Unn-193 #sequence_revision 30-Jun-1993 #text_change 09-Jul-2004
C;Accession: B42955
C;Accession: B42955
R;van Ranst, M.; Fuse, A.; Fiten, P.; Beuken, E.; Pfister, H.; Burk, R.D.; Opdenakker, Virology 190, 587-596, 1992
A;Title: Human papillomavirus type 13 and pygmy chimpanzee papillomavirus type 1: Compa A;Reference number: A42955; MUID:92391075; PMID:1325697
EMBO J. 6, 139-144, 1987

A;Title: Identification of early proteins of the human papilloma A;Reference number: A91068; MUID:87218459; PMID:3034571

A;Accession: B26165
                                                                                                                               E7 protein - human papillomavirus type 18
C;Species: human papillomavirus type 18
C;Date: 30-Sep-1987 #text_change
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A; Molecule type: DNA A; Molecule type: DNA A; Residues: 1-101 <VAN> A; Residues: 1-101 <VAN> A; Residues: 1-101 <VAN> A; Cross-references: UNIPROT:Q02271; UNIPARC:UPI00001383F9; EMBL:X62843; NID:g60295; C; Superfamily: papillomavirus E7 protein C; Superfamily: papillomavirus E7 protein; transcription regulation; zinc finger C; Keywords: DNA binding; early protein; transcription regulation; zinc finger F;61-97/Region: zinc finger CCCC motif
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         C;Species: human papillomavirus type 53
C;Date: 20-Feb-1995 #sequence_revision 20-Feb-1995
C;Accession: $36528
R;Delius, H.; Hofmann, B.
submitted to the EMBL Data Library, August 1993
A;Description: Primer_directed sequencing of human
                                                                                             C; Accession: B26165; H26251
R; Seedorf, K.; Oltersdorf,
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A;Accession: S36528
A;Molecule type: DNA
A;Residues: 1-105 <DEL>
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Best Local
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                58 LTSCSKCCSNVRLVVECTGPDIHDLHDLLLGTLNIVCPLCAPK 100
                                                                                                                                                                                                                                                                                                                                                          55 VTFCCKCDSTLRLCVQSTHVDIRTLEDLLMGTLGIVXPICSQK 97
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                                                                                                                                                                                                                                                                                                                                                                                                           MHGKYPTLKDIVLELTPDPVGLHCNEQLDSS---EDEVDEQATQATQATQHSTLLQCYQI
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43.3%;
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                                                                                             T.; Kraemmer, G.;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 200.5; DB 1;
Pred. No. 3.3e-15;
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Pred. No. 4.5e-16;
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                                                                                               Roewekamp,
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                                                      VqH)
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                                                      16)
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Search completed: June 6, 2006, 12:11:54 Job time : 18.8916 secs		Query Match 38.8%; Score 200.5; DB 1; Length 105; Best Local Similarity 39.6%; Pred. No. 3.5e-15; Matches 42; Conservative 20; Mismatches 33; Indels 11; Gaps 3; 97 1 MHGDTPTLHEYMLDLQPETTDLYXXXYLNDSSEEBEIDGPAGQAEPDRAH 51	A;Molecule type: DNA A;Residues: 1-105 <col/> A;Residues: 1-105 <col/> A;Cross-references: UNIPARC:UPI0000000DB5; GB:X05015; NID:g60975; PIDN:CAA28665.1; PID:g C;Superfamily: papillomavirus E7 protein C;Keywords: DNA binding; early protein; transcription regulation	R;Cole, S.T.; Danos, O. J. Mol. Biol. 193, 599-608, 1987 A;Title: Nucleotide sequence and comparative analysis of the human papillomavirus type 1 A;Reference number: A92937; MUID:87283882; PMID:3039146 B:ACCESSION: H2CSI
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Minimum DB
Maximum DB
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EMBL; D00735; BAA00633.1; -; Genomic_DNA.
EMBL; U76411; AAB18962.1; -; Genomic_DNA.
EMBL; U76412; AAB18962.1; -; Genomic_DNA.
EMBL; U76413; AAB18963.1; -; Genomic_DNA.
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EMBL; AF003020; AAB70737.1; -; Genomic_DNA.
EMBL; AF003020; AAB70740.1; -; Genomic_DNA.
EMBL; AF003024; AAB70741.1; -; Genomic_DNA.
EMBL; AF003025; AAB70741.1; -; Genomic_DNA.
EMBL; AF003025; AAB70742.1; -; Genomic_DNA.
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Viruses; dsDNA viruses, no RN
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24-MAY-2005, sequence version
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GO:0005622; C:intracellular; IEA.
GO:0003700; F:transcription factor activity;
GO:0006355; P:regulation of transcription, DN
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C-XX-C motif-2.
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RESULT 4

Q778G6_HPV16

ID Q778G6, HPV16

AC Q778G6, ID 10-MAY-2005, iD 10-MAY-2005, iD 10-MAY-2006, eD E F protein (Pros Human papillom OC Viruses; dsDNA OC Alphapapillom OC Alphapapillom OC NCBI_TaxID=333

RN [1] TaxID=333

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Viruses; dsDNA viruses, no RL
Alphapapillomavirus.
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MEDLINE=20112892; PubM
van Duin M., Snijders
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                                                                                            NCBI_TaxID=333760;
                                                                                                                           Alphapapillomavirus.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                98 AA;
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                                                                                                                                                                                                                                                                                                                           PRELIMINARY;
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  PubMed=10644829;
ders P.J., Vossen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     11022 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        99.0%;
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                                                                                                                                                    RNA stage;
     Vossen M.T.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   <u>.</u>
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                                                                                                                                                                                                                                                                             UniProtKB/TrEMBI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 512; DB 2;
Pred. No. 4.5e-52;
0; Mismatches 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 of transcription,
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                                                                                                                                                                                                                                                                                                                             PRT;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           factor activity;
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                                                                                                                                                    Papillomaviridae;
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          Voorhorst
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Best Local
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IGB HPV16

Q778G8 HPV16

Q778G8;
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10-MAY-2005,
07-FEB-2006,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  van Duin M., Snijders P.J., Vossen M.T., Klaassen E., Voorhorst F., Verheljen R.H., Helmerhorst T.J., Meijer C.J., Walboomers J.M.; "Analysis of human papillomavirus type 16 E6 variants in relation to p53 codon 72 polymorphism genotypes in cervical carcinogenesis."; J. Gen. Virol. 81:317-325(2000).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Copyrighted by the UniProt Consortium, see http://www.uniprot.org/terms Distributed under the Creative Commons Attribution-NoDerivs License
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Viruses; dsDNA viruses, Alphapapillomavirus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      E7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Verheijen R.H., Helmerhorst T.J., Meijer C.J., Walboomers J.M.; "Analysis of human papillomavirus type 16 E6 variants in relation p53 codon 72 polymorphism genotypes in cervical carcinogenesis.";
                                                                                                                                                                                                                                                           SEQUENCE
                                                                                                                                                                                                                                                                                   NON TER
                                                                                                                                                                                                                                                                                                                                                                                                                         EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MEDLINE=20112892;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NUCLEOTIDE SEQUENCE.
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Pfam; PF00527; E7; 1.
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                                                                                                                                                                                                                                                                                                                                                 L; AJ388067; CAB45127.1; -; Genomic_DNA.
GO:0005622; C:intracellular; IEA.
GO:0003700; F:transcription factor activity; IEA.
GO:0006355; P:regulation of transcription, DNA-dependent;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GO:0005622; C:intracellular; IEA.
GO:0003700; F:transcription factor activity; IEA.
GO:0006355; P:regulation of transcription, DNA-dependent; IEA.
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CDSTLRLCVQSTHVDIRTLEDLLMGTLGIVXPICSQKP
                                                                                               MHGDTPTLHEYMLDLQPETTDLYXYXQLNDSSEEEDEIDGPAGQAEPDRAHYNIVTFCCK 60
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Pred. No. 4.5e
0; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 512; DB 2;
Pred. No. 4.5e-52;
                                                                                                                                                                                                                                                           9BD612534CD2C9EB CRC64;
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RESULT 7
Q778H1 HPV16
ID Q778H1 HPV16
AC Q778H1;
DT 10-MAY-2005, s
DT 10-MAY-2005, s
DT 07-FEB-2006, s
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77869 HP
10 07788
AC 0778
DT 10-M
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DT 10-M
DT 10-M
DT 10-M
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OC Alph
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Matches 95
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10-MAY-2005, sequence
07-FEB-2006, entry ver
E7 protein (Fragment).
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Q778G9_HPV16
Q778G9;
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NON TER
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EMBL; AJ388066; CAB45125.1; -; Genomic_DNA.
GO; GO:0005522; C:intracellular; IEA.
GO; GO:0003700; F:transcription factor activity;
GO; GO:0006355; P:regulation of transcription, Dn
InterPro; IPR000148; Papvi_E7.
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                                                                                          NUCLEOTIDE SEQUENCE.

MEDLINE=20112892; PubMed=10644829;

Van Duin M., Snijders P.J., Vossen M.T., Klaassen E., Voorhorst F.

Verheijen R.H., Helmerhorst T.J., Meijer C.J., Walboomers J.M.;

"Analysis of human papillomavirus type 16 E6 variants in relation
p53 codon 72 polymorphism genotypes in cervical carcinogenesis.";
J. Gen. Virol. 81:317-325 (2000).
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Viruses, dsDNA viruses, no RN
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ID Q778H7, HPV16
AC Q778H7;
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GO; GO:0005622; C:intracellular; IEA.
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InterPro; IPR000148; Papvi_E7.
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MEDLINE=20112892; PubMed=10644829;
MEDLINE=20112892; PubMed=10644829;
Van Duin M., Shijders P.J., Vossen M.T., Klaassen E., Voorhorst F.
Verheijen R.H., Helmerhorst T.J., Meijer C.J., Walboomers J.M.;
"Analysis of human papillomavirus type 16 E6 variants in relation
"Analysis odon 72 polymorphism genotypes in cervical carcinogenesis.";
p53 codon 72 polymorphism genotypes in cervical carcinogenesis.";
J. Gen. Virol. 81:317-325 (2000).
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Pred. No. 4.
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          9BD612534CD2C9EB CRC64;
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RESULT 12
Q77811 HPV16
ID Q77811;
AC Q77811;
DT 10-MAY-2005, integrated into Uni
DT 10-MAY-2005, sequence version 1.
DT 07-FEB-2006, entry version 3.
DE E7 protein (Fragment).
OS Human papillomavirus type 16.
OC Viruses; dsDMA viruses, no RNA 8
OC Alphapapillomavirus.
OC Alphapapillomavirus.
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GO; GO:0005622; C:intracellular; IEA.
GO; GO:0003700; F:transcription factor activity; IEA.
GO; GO:0006355; P:regulation of transcription, DNA-dependent;
GO; GO:0006356; P:regulation of transcription, DNA-dependent;
IDECTRO, IPRO00148; Papvi_E7.
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Viruses; dsDNA viruses, no RN
Alphapapillomavirus.
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Pred. No. 4.5e-52;
0; Mismatches :
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RESULT 13
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AC Q77813; HPV16

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NUCLEOTIDE SEQUENCE.

MEDLINE=20112892; PubMed=10644829;

van Duin M., Snijders P.J., Vossen M.T., Klaassen E., Voorhorst F.

Verheijen R.H., Helmerhorst T.J., Meijer C.J., Walboomers J.M.;

"Analysis of human papillomavirus type 16 E6 variants in relation p53 codon 72 polymorphism genotypes in cervical carcinogenesis.";

J. Gen. Virol. 81:317-325(2000).
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GO; GO:0003700; F:transcription factor activity; IEA.
GO; GO:0006355; P:regulation of transcription, DNA-dependent; IEA.
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Human papillomavirus type 16
Viruses; dsDNA viruses, no R
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MEDLLINE=20112892; PubMed=10644829;
van Duin M., Snijders P.J., Vossen M.T., Klaassen E., Voorhorst F.
van Duin M., Snijders P.J., Vossen M.T., Klaassen E., Voorhorst F.
Verheijen R.H., Helmerhorst T.J., Meijer C.J., Walboomers J.M.;
"Analysis of human papillomavirus type 16 E6 variants in relation
p53 codon 72 polymorphism genotypes in cervical carcinogenesis.";
J. Gen. Virol. 81:317-325(2000).
                                                                                                                                                                                                                                                                                                                                                                                                                                                Copyrighted by the UniProt Consortium, Distributed under the Creative Commons
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Alphapapillomavirus.
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GO; GO:0005562; C:intracellular; IEA.
GO; GO:0003700; F:transcription factor activity; IEA.
GO; GO:0006355; P:regulation of transcription, DNA-dependent;
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PF00527; E7; 1.
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                                                                                                        Score 512; DB 2;
Pred. No. 4.5e-52;
D; Mismatches 3
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CDSTLRLCVQSTHVDIRTLEDLLMGTLGIVXPICSQKP

CDSTLRLCVQSTHVDIRTLEDLLMGTLGIVCPICSQKP

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RESULT 15
Q77A11 HPV16
ID Q77A11;
DT 10-MAY-2005, s
DT 10-MAY-2005, s
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DE E7 protein (Fr
OS Human papillom
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OC Alphapapilloma
OX NCBI_TAXID=333
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10-MAY-2005, integrated into U
10-MAY-2005, sequence version
07-FEB-2006, entry version 3.
E7 protein (Fragment).
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MEDLINE=20112892; PubMed=10644829;

WEDLINE=10112892; PubMed=10644829;

Van Duin M., Shijders P.J., Vossen M.T., Klaassen E., Voorhorst F.,

Verheijen R.H., Helmerhorst T.J., Meijer C.J., Walboomers J.M.;

"Analysis of human papillemavirus type 16 E6 variants in relation to p53 codon 72 polymorphism genotypes in cervical carcinogenesis.";

J. Gen. Virol. 81:317-325(2000).
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Viruses, dsDNA viruses, no RN
Alphapapillomavirus.
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G0:0005622; C:intracellular; IEA.
G0:0003700; F:transcription factor activity; IEA.
G0:0006355; P:regulation of transcription, DNA-dependent; IEA.
erPro; IPR000148; Papvi_E7.
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Pred. No. 4.5e-52;
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